The Dissertation Committee for Matthew Roe Dasti certifies that this is the approved version of the following dissertation:

Rational Belief in Classical India:

Nyāya's Epistemology and Defense of Theism

Committee:

____

Stephen Phillips, Supervisor

____

Daniel Bonevac

____

Edwin Bryant

____

Cory Juhl

____

Robert Koons

____

E. David Sosa

Rational Belief in Classical India:

Nyāya's Epistemology and Defense of Theism

by

Matthew Roe Dasti, B.A.; M.A.

Dissertation

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

Doctor of Philosophy

The University of Texas at Austin

May 2010

Preface

As I get older, it becomes increasingly clear to me that one person's successes invariably depend on the shared sacrifices of many others. In light of this, I'd like first to thank my wife Nandanie for her unfailing support and many sacrifices. Without her patience and encouragement, I would not have been able to complete this dissertation in a satisfactory way. I'd also like to thank my mother, Lynn Eick, for a lifetime of support. Third, I am both gratified and humbled to recall the kindness of those who offered me training and guidance throughout my undergraduate and graduate education. Specifically, I'd like to thank Martha Bolton, Robert Bolton, Dan Bonevac, Henry W. Bowden, Edwin F. Bryant, Cory Juhl, Robert Koons, Matt K. Matsuda, Stephen Phillips, David Sosa, and Paul Woodruff. Amongst these, I owe particular debts of gratitude to Professors Koons, Sosa, Woodruff, and most especially Phillips. Looking back over my education, I see that there is no way I could repay all of their efforts on my behalf. My hope is to serve my own students in the same spirit. Professor Phillips, my dissertation advisor, has been a constant source of encouragement, stimulating philosophical discussion, and good direction. It would be difficult to adequately express my indebtedness to him. With immense gratitude, I dedicate this dissertation to my teachers.

Abstract

Rational Belief in Classical India: Nyāya's Epistemology and Defense of Theism

Matthew Roe Dasti, Ph.D.

The University of Texas at Austin, 2010

Supervisor: Stephen Phillips

Nyāya is the premier realist school of philosophy in classical India. It is also the home of a sophisticated epistemology and natural theology. This dissertation presents a distinctive interpretation of Nyāya's epistemology and considers how it may be developed in response to various classical and contemporary challenges. I argue that it is best understood as a type of reliabilism, provided relevant qualifications. Moreover, I show that a number of apparently distinct features of Nyāya's approach to knowledge tightly cohere when seen as components of a thoroughgoing epistemological disjunctivism. I defend Nyāya epistemology as a viable contemporary option, illustrating how it avoids problems faced by generic reliabilism. In the second portion of the dissertation, I examine the way in which Nyāya's knowledge sources (perception, inference, and testimony) are deployed in support of a theistic metaphysics, highlighting Nyāya's principled extension of its views of knowledge acquisition. In an appendix, I provide a full translation and commentary on an argument for God's existence by Vācaspati Miśra (a 10th century philosopher who is unique in having shaped several distinct schools), found in his commentary on *Nyāya-sūtra* 4.1.21.

Table of Contents

Primary Texts Cited, Abbreviations (if used), Authors, and Author Dates[1]

Nyāya-Vaiśeṣika

Vaiśeṣika-sūtra (VS) by Kaṇāda, c. 100 (all dates CE unless otherwise noted)

Nyāya-sūtra (NS) by Gautama, c. 200

Nyāya-bhāṣya (NB) by Vātsyāyana, c. 450

Padārtha-dharma-saṁgraha (PDS) by Praśastapāda, c. 575

Nyāya-vārttika (NV) by Uddyotakara, c. 600

Nyāya-mañjarī (NM) by Jayanta Bhaṭṭa, c. 875

Nyāya-vārttika-tatpārya-ṭīka (NVT) by Vācaspati Miśra, c. 950

Nyāya- vārttika-tatpārya-ṭīka-pariṣuddhi (NVTP) by Udayana, 975-1050

Ātma-tattva-viveka (ATV) by Udayana

Nyāya-kusuma-añjali (NK) by Udayana

Kiraṇāvali by Udayana

Tarka-bhāṣā (TB) by Keśava Miśra, c. 1225

Tattva-cintā-maṇi (TC) by Gaṅgeśa Upadhyāya, c. 1325

Tarka-saṁgraha (TS) by Aṇṇam Bhaṭṭa, c. 1550

Bhāṣā-paricchedaka (with Muktāvali commentary) by *Viśvanātha*, c. 1550

Nyāya-darśana (ND) (a 20th Century compilation of the *Nyāya-sūtra* and principal commentaries by Taranatha Nyāya-Tarkatirtha and Amarendramohan Tarkatirtha)

[1] Here, I generally follow Potter (1977 and 1992). Most of the dates for Classical texts and authors are approximations based on a number of considerations. Generally, I have rounded off for mnemonic ease.

Buddhism

Abhidharma-kośa-bhāṣya by *Vasubandhu* c. 350

Pramāṇa-samuccaya by *Dignāga* c. 500

Pramāṇa-vārttika by *Dharmakīrti* c. 600

Tattva-saṁgraha by *Śāntarakṣita* c. 725

Īśvara-sādhana-dūṣaṇa by Ratnakīrti c. 1000-1050

Yoga

Yoga-sūtra (YS) by Patañjali, c. 300

Yoga-bhāṣya (YB) by Vyāsa, c. 750

Tattva-vaiśaradī by Vācaspati Miśra, c. 950

Vedānta

Vedānta-sūtra (or *Brahma-sūtra*) by Badarāyana, c. 100

Śarīraka-bhāṣya by Śaṅkara, 788-820

Śrī-bhāṣya by Rāmānuja, 1017-1137

Mīmāṁsā

Mīmāṁsā-sūtra by Jaimini, c. 200 BCE-200 CE

Śabara-bhāṣya by Śabara, c. 200

Śloka-vārttika (SV) by Kumārila Bhaṭṭa, c. 650

Other

Sāṁkhya-kārikā (SK) by Īśvarakṛṣṇa c. 450

Vākya-padīya (VP) by Bhartṛhari, c. 450

Bhakti-rasa-amṛta-sindhu (BRS) by Rūpa Goswamin, c. 1500

śraddhā-mayo 'yam puruṣah

yo yac-chraddhaḥ sa eva saḥ

This person is composed of trust.

As his trust is, so is he.

(*Bhagavad-gītā* 17.3)

Introduction

The above passage from the *Bhagavad-gītā* illustrates a familiar theme in Upaniṣadic literature: the identification of a single psycho-physical quality in order to underscore its importance in human development. Such formulations take the form "a person is composed of x" and underscore the care one must take in developing the quality in question.[1] Later verses in the seventeenth chapter of the *Bhagavad-gītā* note that one's trust or faith (*śraddhā*), broadly construed as a tendency to place confidence and focus one's efforts, impacts fundamental decisions including the kinds of thing one chooses to venerate, the kinds of hardships one chooses to endure, and the kind of person one becomes. As such, it must be cultivated with extreme care.

Here, "trust" does not have a uniquely epistemic sense. But many pioneering Indian philosophers would stress the centrality of epistemology and epistemic trust in support of a well-lived life. The Buddha's famous Eight-fold Noble Path begins with the development of

[1] Perhaps the most famous of such passages is *Bṛhadāranyaka Upaniṣad* 4.4.5*,* which claims that a human being is composed of desire (*kāma-māya*). Desires motivate actions of various kinds, which, taken in sum, shape one's character. The moral is that one should develop the habit of desiring properly, since what one becomes depends upon what one desires.

"right views" (*samyak-dṛṣṭi*), life-guiding perspectives which allow one to live according to truth. *Nyāya-sūtra* 1.1.2 claims that correct apprehension of reality (*tattva-jñāna*) is the lynchpin of a life directed to attainment of the *summum bonum*.[2] Philosophers in the Mīmāṁsā (Exegete) tradition develop a sophisticated epistemology in defense of Vedic testimony and an associated culture of sacrificial duty. Skeptics notwithstanding, a fairly common perspective held that achievement of the highest personal good(s) requires acting in conformity with the proper metaphysical map. Such maps were drawn and defended by appeal to the deliverances of recognized knowledge sources (*pramāṇas*).[3]

As India's classical period of philosophy (c. 500-1500 CE) flourished, the importance of epistemology only increased.[4] The dialectical and adversarial nature of classical Indian philosophy—which, from its early stages, was comprised of various competing schools—led it to emphasize evidence, proof, and rational defense of one's own metaphysical and ethical positions. Matilal (1998: 32) aptly captures this in his suggestion that for classical thinkers, debate was "a preferred form of rationality."

What unites an individual's quest for life-guiding knowledge and a philosopher's struggle to publicly defend the metaphysical and ethical holdings of his school is the employment of *pramāṇas*. *Pramāṇas*, knowledge sources, are means by which veridical cognitions are produced. The most prominent *pramāṇas* are perception, inference and testimony. As means of veridical cognition, they are furthermore the ultimate court of appeal in philosophical debate.[5] A phrase which was common in classical debate was *atha bhavataḥ*

[2] . . . *tattva-jñānāt niḥśreyasa-adhigamaḥ.*
[3] See K. K. Chakrabarti 1984: 339 and Ganeri 2001b: 15-16.
[4] The classical period of Indian thought begins soon after the dawn of the Common Era and continues through the latter portion of the second millennium. It is bracketed by the earlier Vedic period and the later modern period. See Phillips 1995: 324n.1.
[5] See Matilal 1986: 35-6.

kiṁ pramāṇam? "What is your *pramāṇa*?"[6] In other words, how is your metaphysical or ethical holding derived from *pramāṇa*-produced cognitions?

This dissertation examines Nyāya's *pramāṇa* theory, particularly as deployed in defense of theistic belief. In its mature development, the Nyāya school claims that knowledge sources converge in support of the theistic hypothesis, and it appeals to the resources of *pramāṇa* theory to defend theistic belief against the attacks of various competing schools. Arguably comprised of classical Hinduism's[7] leading epistemologists, Nyāya is relevant to contemporary epistemology for its development of a sophisticated analogue of reliabilism (particularly process reliabilism)[8] and a conception of epistemic responsibility which allows for default, unreflective justification accorded to putatively veridical cognitions. Nyāya thinkers were furthermore (and again arguably) India's rational theologians *par excellence*. For at least a millennium, Nyāya honed a variety of arguments and appealed to the *pramāṇas* in support of a baseline theism, in constant engagement with India's most sophisticated philosophical atheists.[9] This dissertation has two parts, corresponding to Chapters 1-2 and Chapters 3-5. In the first part, I will examine and interpret *pramāṇa* theory as developed by Nyāya. The second part will examine a handful of case

[6] This is a quote from Uddyotakara's Nyāya-vārttika (2.1.16; ND 436). He provides another paradigmatic remark elsewhere (NV 2.1.33; ND 477): "You must state your *pramāṇa*, as there is no proof whatever which is not *pramāṇa*-derived" (*pramāṇam vaktavyam na hy aprāmāṇikī kācit pratipattir asti*).

[7] *Hinduism* is a notoriously slippery concept. For my purposes, it refers to the large network of cultural traditions which see themselves as the inheritors of the ancient Vedic culture and which tend to give credence to a certain body of texts, (like the ancient Indian epics), metaphysical tenets (like reincarnation) and cultural practices (like the caste system).

[8] Process reliabilism is the view that provides a belief with positive epistemic status is that it has been formed and/or maintained by a reliable belief-forming or belief-maintaining mechanism. On such grounds, it may be held, for example, that the reason that perceptual beliefs are generally justified, while those produced by crystal-ball gazing are not is that the former is a reliable method of belief generation and the latter is not. Goldman 2000 [1979] is a paradigmatic statement of the view. Goldman 1993 provides a clear introduction to the position and the challenges it faces. Commonly, reliabilism is contrasted with views which stress the need for an individual's conscious, active reflection on the evidence for her beliefs in order to justify them.

[9] Most notably Buddhism and Mīmāṁsā.

studies—selected on the grounds of philosophical and historical importance—which illumine the intersection of *pramāṇa* theory and the question of theistic belief.

By way of introduction, a few more words about Indian philosophy and rationality: The old saw that Indian thought is primarily anti-rational or intuitive is, of course, deeply misleading. Unfortunately, even some leading contemporary thinkers have perpetuated such ideas. From Anthony Flew's *Introduction to Philosophy*:

> Philosophy, as the word is understood here, is concerned first, last and all the time with argument. It is, incidentally, because most of what is labeled *Eastern Philosophy* is not so concerned—rather than any reason of European parochialism—that this book draws no materials from any source east of Suez. (Flew 1971: 36; quoted in Matilal 1986: 4)

Two things are noteworthy about the above quotation. First, it is found in an introductory text that was likely written for undergraduates and other novices and thus meant to help form their basic conception of philosophy.[10] Because of this influence, Flew's claim is particularly pernicious. Second, its author was one of the leading philosophers of religion in the 20th century, and if he had any awareness of the richness of Indian debate in philosophy of religion (and particularly the design argument as discussed in Chapter 4 of this dissertation), he may have recognized some of his own thinking anticipated in the ancient sources. Of course, Flew was not alone, and for that matter not only Westerners are to blame for a fairly pervasive misunderstanding of Indian philosophy. It was not uncommon for modernizing Indian thinkers to promulgate the notion of Indian thought as essentially non-discursive and mystical. Perhaps more influentially than any other, Sarvepalli Radhakrishnan, India's

[10] The quotation was taken from a section entitled "An introduction for the lay majority."

onetime President and the Spalding Professor of Eastern Religions and Ethics at Oxford, promoted this vision: “The whole course of Hindu philosophy, is a continuous affirmation of the truth that insight into reality does not come through rational intellect” (quoted in Ganeri 2001a: 2). Ganeri (2001a: 2) suggests that “these [notions] were, to a more considerable extent than is usually recognized, a product of the colonized Indian intellectual struggle for an indigenous, non-European identity.”

The “non-rational” conception of Indian thought which tended to dominate early Western attitudes is thus largely due to insufficient scholarship and occasional bigotry on the part of Western scholars, coupled with an attempt by influential Indian thinkers to create an identity for Indian thought in contrast to the tradition stemming from the European Enlightenment. Daya Krishna summarizes these twin tendencies:

> The interests of western Indological studies combined with the search for a spiritual self-identity in the face of overwhelming western superiority in all fields of knowledge seemed to have led to the creation of a certain picture of India’s philosophical past which has become fixed in the minds of successive generations of students and teachers, both in India and abroad. (1991: vii)

While mystical aspects of religious theorizing is indeed an important element in Indian thought, what is remarkable—and generally unexpected by those with little acquaintance with it—is just how much Indian philosophy of religion and philosophical theology is permeated by rigorous adversarial debate. For example, Śaṅkara (c. 800) and Rāmānuja (c. 1050), two pillars of Vedāntic thought, pepper their commentaries on the *Bhagavad-gītā*—a religious text to be sure—with philosophically sensitive (and sometimes hostile) criticism of rival interpretations. This criticism takes the form of stating the opposed

objections, rebutting them, considering counter-arguments, and so on, until a satisfactory resolution is found.[11]

As noted above, the adversarial nature of Indian philosophy made for a heavy emphasis on epistemology in the context of defending metaphysical truth-claims. This included claims regarding the existence and nature of God. Though my dissertation is motivated by philosophical interest, and by recognition of the philosophical value of the subjects with which it will engage, I hope that it will also serve to also assist in the removal of the lingering after-effects of the overstressed non-rational character imputed to Indian thought in colonial and post-colonial contexts.

Regarding what is often thought of as the religious orientation of much of Indian thought, the characterization is not inapt if understood as part of a fairly common ancient notion that philosophy—even in its most rigorous and technical aspects—is meant to inform and support a life aimed at some ultimate good. This attitude is, of course, shared by Western thinkers like Plato and Aristotle, and schools like the Stoics and Skeptics. For many Indian schools, the ultimate good was conceived of as some kind of enlightened state which was preceded by meditational practice, the practice of yoga. I think that it is safe to say that beliefs which support such practice are simultaneously among those most deeply held and those which are most tendentious. As such, they provide some of the best examples of the mutual influence between epistemic methodology and core metaphysical holdings. In the crucible of debate, epistemic methodology is honed, adapted, and revised in order to defend core metaphysical beliefs, while conversely, metaphysical beliefs are modified and amended when they are found to be epistemically below par. There are a number of examples of this dynamic in classical India. Perhaps most famously, the Mīmāṁsā idea that cognition partakes of "intrinsic veridicality" (*svataḥ prāmāṇya*) is developed to defend the authority of

[11] See for example, Śaṅkara's commentary on *Gītā* 2.16 and Rāmānuja's commentary on *Gītā* 2.12.

Vedic scriptural injunction. Likewise, Yogācāra Buddhist philosophers' attitude toward the ineffability of nirvana leads them to argue for a sparse epistemology of genuine, non-propositional perception and ultimately delusive, conceptually-laden inference. Both Mīmāṁsakas and Buddhists argue that theism is untenable, since it is not supported by valid *pramāṇas*. On the other hand, Nyāya argues that theism is richly supported by the deliverances of *pramāṇas*, and develops a theory of inferential extrapolation which supports inferences to the existence of God. "Skeptics" like the Buddhist Nāgārjuna or the Vedāntin Śrīharṣa undermine confidence in a knowable world of discreet entities in order to help individuals develop the detachment required for genuine experience of a trans-conceptual reality. Theistic Vedāntins, led by Rāmānuja, claim that the radial monism of Advaita Vedanta is incapable of being supported by any *pramāṇa*, as knowledge presupposes distinctions of various sorts. And so on.

Why have I chosen Nyāya as my focus in a study of the intersection of epistemology and theism in classical India? First, Nyāya is one of the most important and influential philosophical traditions in India, a leading school within the "Hindu" umbrella—those communities which saw themselves as the inheritors of the ancient Vedic civilization and allied cultural traditions expressed in the great epics and other texts. Nyāya's work in epistemology clearly influences other schools to a large degree, while Nyāya methods of analysis and argument resolution influence much of classical Indian literary criticism, philosophical debate, and jurisprudence. A study and original interpretation of Nyāya epistemology is itself warranted, as is a further examination of its epistemology of religion. Furthermore, Nyāya expressly conceives of itself as a rational defender of classical Hindu religious and theistic culture, and is therefore a fit locus of exploration for the defenses

available to the theistic hypothesis from within the Indian tradition.[12] Third, Nyāya defends what I will call a "minimalist theism," something akin to the God of natural theology. While individual Naiyāyikas were members of specific religious communities (generally Śaivite or Pāśupata[13]), their philosophical theology is ecumenical and amenable to appropriation by various schools. This should contribute to its appeal, not only for historical or ethnographic purposes, but as a point of convergence and shared concern with Western philosophers and theologians.

In the remaining portion of this introduction, I will discuss my primary audience, objectives and methodology, and provide a concise schematic of the dissertation.

I expect that my primary audience will be the following: students of philosophy or philosophers who are particularly concerned with epistemology, the epistemology of religious belief, and philosophy of religion more generally, who would be interested in the treatment given to these topics by important non-Western philosophers. Beyond this, I would include scholars of Indian philosophy or religion. Of course, others will hopefully find this dissertation to be of interest. I hope that scholars within fairly disparate fields of study would engage with my work. Therefore, I will err on the side of caution and explain most technical philosophical terms and Sanskrit words.

---

[12] We have seen that the *Nyāya-sūtra* claims that the ultimate good (*niḥśreya*) requires correct apprehension of reality (*tattva-jñānāt*). The earliest known commentator, Vātsyāyana (NB Introduction; ND 34-5, 64), notes that as a course of study, Nyāya (here called *nyāya-vidyā* and *anvīkṣikī-vidyā*) has the same interests as the study of the self (*ādhyātma-vidyā*) which is found in the Upaniṣads and other religious literature. What distinguishes Nyāya, he claims, is a specific investigation into epistemological issues like the nature of legitimate doubt, and various metaphysical holdings. He adds that as a discipline of inquiry, Nyāya is the support (*āśraya*) of all *dharmas*. Jayanta (NM Introduction; Varadacharya, ed. 1969, 7) claims that amongst the various research programs in the umbrella of classical Vedic culture, Nyāya is of chief importance, since it aims to defend Vedic tradition and its manifold subdivisions of study from the attacks of rival, anti-Vedic philosophers. From fairly early in its history, Nyāya specifically took it upon itself to defend the existence of God (*Īśvara*). Udayana's (1000 CE) *Nyāya-kusuma-añjali* is widely hailed as the definitive treatment of rational theology in classical India.

[13] Potter (1977: 21-3).

As I understand it, work in the history of philosophy is often advanced through the uncovering of and development of philosophical space hitherto unknown to or underappreciated by the general philosophical community. For the historian, this often involves translating and commenting on philosophical texts unavailable to the larger philosophical community, by reflection and critique of arguments provided by the historical thinkers, and by purposeful juxtapositions of classical and contemporary issues and solutions. I intend to use my training in contemporary methods of philosophical analysis, my knowledge of the history of philosophy, and my training as a Sanskritist to perform such tasks.

My objectives are as follows:

Exposition. I intend to provide analysis which (i) reveals the deep structural features of Nyāya's epistemology, and (ii) elucidate the employment of *pramāṇa* theory in relation to the question of theism. Under this heading, my aim is expository, to make clear the classical thinkers and their arguments. In general, I conceive of this as a basic task of a historian of philosophy: to preserve the philosophical artifacts within cultural memory, so to speak, and to profit by continued engagement with important thinkers and movements of the past. Some of this consists in the philosophically sensitive translation of Sanskrit texts. I should note that all translations are mine, unless otherwise noted. With a few exceptions, I will provide the original Sanskrit within parentheses or in footnotes. To some degree I will also respond to contentions within the secondary literature about the historical connections between thinkers and ideas. I am, nevertheless, primarily writing as a philosopher. By this, I mean that my ultimate concern is the viability of the arguments given by our thinkers, and not necessarily the historical relations between them. As such, there is an atemporal core to my interest in the texts.

Interpretation. I intend to extrapolate the classical arguments in a historically sensitive way. Since I am trying to consider what aspects of classical thought may be of enduring relevance, I will engage in reconstructive and forensic efforts, considering what resources are available to our thinkers in response to contemporary philosophical developments and challenges. Under this heading, my primary aim is exploratory, using my own philosophical training and knowledge of the classical sources to engage them with issues which may transcend their historical circumstances in a way that is sensitive to the historical traditions. My engagement with contemporary debate is not for the sake of mere comparison but rather an attempt to use recent developments in order to explore and frame the classical thinkers and vice versa.

Evaluation. I intend to critique the classical arguments and positions in relation to both their dialectical context and our own. Here, my primary aim is to pass judgment on the philosophical merits of the classical sources, both *in situ*, and as rationally reconstructed. In this regard, I would like to make a further comment on my perspective. Commonly, philosophy advances through adversarial argument. In the West, such an approach goes back at least to Plato. In India, it goes back to the ancient traditions of debate which precede Nyāya. As a student of classical philosophers, I find that my research is strengthened by considering (i) how one could attack their weak points and (ii) how one could defend their views in response to challenges. In this study, I do both. One the whole, I tend to focus on how Nyāya philosophy may be charitably refined or reconsidered in response to challenges. This is due in part to my sympathy with some (indeed not all) components of Nyāya thought and in part as an interpretive tool.

A word on issue/text selection: I am focusing on particular issues and texts from within a very large swathe of Indian philosophical history. There are three main criteria which govern my selection: (i) *Subjective relevance*. Issues or texts which are central to the

classical tradition as it conceived itself will be given more weight. (ii) *Universal appeal*. Debates which hinge on the peculiarities of esoteric doctrines are less important to me than those which have wide-reaching philosophical importance. (iii) *Contemporary relevance.* Naturally, as a contemporary philosopher, I am interested in issues and solutions which speak to current philosophical concerns.

Chapter 1: The Character of Nyāya Epistemology

1.0 Introduction to *Pramāṇa* Theory

Nyāya defends the following epistemological schema: cognition partakes of high-grade positive epistemic status (*prāmāṇya*) iff

a. It is produced by a *pramāṇa*.
b. Its status is not undermined by (undefeated) legitimate doubt or adversarial challenge (where such doubt or challenge must be known to the epistemic subject, or is of a kind that should be recognized by her if she were being epistemically responsible).

This chapter will explicate the philosophical underpinnings of this simple formulation. First, some historical background: The word which corresponds to "epistemology" in Sanskrit philosophy is *pramāṇa-vāda,* the "theory (*vāda*) of knowledge sources (*pramāṇa*)."[14] The word *pramāṇa* has been translated in various ways, including "instrument of knowledge" (Potter 1977: 155), "accredited means of knowing" (Matilal 1998: 1), "means of true cognition" (Mohanty 2000: 163), and "knowledge source" (Phillips/Ramanuja Tatacharya 2004: 692). In this dissertation, I will commonly leave the term untranslated, though I will occasionally use variants of those given above.

The word *pramāṇa* is formed from the verbal root √*mā*, ("measure"; "ascertain") and in non-philosophical texts, it commonly refers to agents or instruments of authoritative measurement or judgment. In the *Hītopadeśa*, a compilation of ancient Indian fables, King

[14] Texts which discuss epistemology are commonly called *pramāṇa-śāstra*, "authoritative epistemological texts."

Sudarśana tells the learned Viṣṇūśarma "You are the authority (*pramāṇa*) for teaching the science of practical wisdom to these sons of mine" (Lanman, ed. 2004: 19)." *Bhagavad-gītā* 3.21 states that "the standard (*pramāṇa*) set by an eminent man is followed by common people." In Kālidāsa's *Śakuntalā*, King Duṣyanta reflects that "when doubtful matters arise, good people trust their internal feelings as the authority (*pramāṇa*)" (quoted in Davis 2007: 287).

In philosophical discourse, *pramāṇa* normally refers to a means or process by which veridical awareness-episodes (*pramā*) are generated.[15] *Nyāya-sūtra* 4.2.29 declares that things are established by *pramāṇas* (*pramāṇatas ca artha-pratipatteḥ*). Vātsyāyana (c. 450 CE) glosses the meaning of *pramāṇa* as "that by which something is properly cognized (*pramītyate anena*)" (NB 1.1.3; ND 91). Uddyotakara (c. 600 CE) concurs: "what is spoken of as a *pramāṇa*? A *pramāṇa* is the cause of a [veridical] cognition (*upalabdhi-hetu pramāṇam*). *Pramāṇa*-hood is the condition of producing [veridical] cognitions (*upalabdhi-hetutvam pramāṇatvam*)" (NV 1.1.1; ND 15). It is noteworthy that Vātsyāyana (NB 1.1.1; ND 38) defines the Nyāya philosophical method as "investigation of a subject by means of *pramāṇas.*"[16] Uddyotakara (NV 1.1.1; ND 38-9) elaborates on the dialectical employment of *pramāṇas*: "Nyāya occurs when the *pramāṇas* are employed collectively in the establishment of an object. . . this (employment of the *pramāṇas* in unison) is the highest *nyāya*, as it demonstrates the truth (of one's position) to an opponent."[17]

---

[15] Naiyāyikas (and other philosophers like Kumārila) recognize the existence of bivalent language regarding *pramāṇas.* The term *pramāṇa* is commonly used to refer to processes or means of veridical cognition-generation, like perception or inference. Sometimes, however, a veridical cognition itself is called a *pramāṇa* (a common Buddhist usage). In this second case, *pramāṇa* denotes a factive mental state, and is a synonym of *pramā* or *pramīti*. In this paper, I will focus on the first meaning, as it is more consistent with the notion of *pramāṇa* in the tradition as a whole as will be seen in the definitions of *pramāṇa* given by Naiyāyikas.

[16] *pramāṇair artha-parīkṣaṇaṁ nyāyaḥ*

[17] *samasta-pramāṇa-vyāpārād artha-adhigati-nyāya iti. . . so 'yam vipratipanna-puruṣa-pratipādakatvāt paramo nyāya iti.*

Centuries of unsystematic Indian epistemological speculation began to coalesce around the turn of the Common Era including the production of, among other things, the *Vaiśeṣika-sūtra* (c. 100 CE; in citation, *VS*), "the *sūtras* of the Atomist (or Particularist) school," the work of the "skeptical" Buddhist Nāgārjuna (c. 200 CE), and the *Nyāya-sūtra* (c. 200 CE; in citation, *NS*).[18] *Sūtra* texts codify and systematize large bodies of information and are commonly the core texts for individual philosophical traditions. Such traditions develop in the form of commentaries and sub-commentaries upon the root *sūtra* text. The *Nyāya-sūtra* and *Vaiśeṣika-sūtra* endorse realism—the mind-independent world of common experience is real and by employing our natural faculties properly we can know much about it. They both attempt an analysis and defense of *pramāṇas*—the *Vaiśeṣika-sūtra* recognizes two, perception and inference, while the *Nyāya-sūtra* recognizes four, adding testimony and knowledge by analogy. Buddhist schools were commonly anti-realist. The Idealist Yogācāra Buddhists were logical and epistemological innovators, as seen in the pioneering work of Dignāga (c. 480) and Dharmakīrti (c. 600). Conversely, Mādhyamika Buddhists were skeptical about the entire *pramāṇa* project. Led by Nāgārjuna, they subject it to devastating criticism.[19]

Despite disagreements over much else, various schools of classical Indian philosophy shared a common vocabulary regarding *pramāṇas* and common notions of what a *pramāṇa* is.[20] Mohanty (2000: 3) notes three claims made by any *pramāṇa* theory:

1. Some cognitions are true.

[18] See Matilal 1977: 76-78 for a concise discussion of the historical background of the *Nyāya-sūtra*, including its primordial origins in handbooks on debate (*vāda-śāstra*).
[19] For accessible translations and commentary on seminal works of Nāgārjuna, see Bhattacarya, Johnston and Kunst, trans. and ed. 1998 and Garfield 1995.
[20] Potter (1984: 123) goes so far as to claim that "Indian epistemology features a conception of knowledge which is nonequivocally shared by all its schools."

2. Some of these cognitions belong to a type that is irreducible to any other type.
3. True cognitions belonging to such an irreducible type are caused by a unique aggregate of causal conditions.

Theorists of various schools debated over the nature and number of irreducible *pramāṇas*. This spurred mutual philosophical innovation with centuries of critique, response, and counter-critique.

1.1 Cognitions, Veridicality, and Responsibility

I'd like to provide a few terminological and conceptual clarifications. First, while contemporary epistemologists have long concerned themselves with belief, Indian thinkers speak of cognition (*jñāna*, *buddhi*, *upalabdhi, pratyaya*) and a subset of cognition, awareness-episodes (*anubhava*), which, unlike cognition, exclude the deliverances of memory. There are a few relevant distinctions between belief and cognition as understood by the Indian thinkers: (i) while beliefs are plausibly conceived of as dispositional attitudes, cognitions are momentary, episodic, intentional states, commonly individuated by reference to their intentional objects.[21] (ii) Belief is thought to require some kind of pro-attitude or assent. Cognitions need not. A large subset of cognition, however, consists of assenting, cognition which partakes of *niścayatva*, subjective certainty. (iii) We say that beliefs have content, while, for Nyāya, cognitions have "objecthood" (*viṣayatā*). Phillips (2004: 13) notes that "objecthood, which is also called 'having-an-object', is the relation between cognitions and their objects. It is a direct relation between cognitions and things . . . Strictly speaking,

[21] See NS 3.2.42ff and allied commentaries for a discussion of the nature of cognition. See Potter 1984: 309-311 and Phillips/Ramanuja Tatacharya 2004: 13-16 for concise expositions on cognition in Nyāya.

cognitions do not have content; they have intentionality which is by its very nature is the hitting of things." In short, where contemporary epistemologists may seek belief content which appropriately matches reality, Naiyāyikas seek cognitions with the appropriate relation to reality.

The deliverances of *pramāṇas* thus do not represent the world as much as provide for direct cognitive contact with it. Cognition is propositionally structured, but this structure is not based on intermediary entities like sense data or propositions. Rather, it is simply the nature of cognition's layered relationship to external, qualified objects, as seen from a subject's perspective. This structure minimally has three elements (with the possibility of iteration) corresponding to the three features of the external object in question: a portion of the cognition targets the substantive object, a portion of the cognition targets a property of the object, and finally, a portion of the cognition targets the relationship between the substantive object and its property.[22]

In cases of veridical cognition (*pramā*), the portion of cognition which targets a substantive and the portion which targets its property match up. Gaṅgeśa (c. 1325 CE) famously defines veridical cognition as "an awareness-episode with predication content *x* about something qualified by *x*" (*Tattvacintāmaṇi*, *pramā-lakṣaṇa-vāda*; Phillips/Tatacharya 2004: 236).[23] Seeing a male human being as qualified by "man" would be a paradigm case of veridical cognition. Error is generally classified as a misfire of the part of cognition which targets the property. In error, some substantive must be cognized, but the property targeted does not qualify the substantive. The intentionality of the cognition is bifurcated such that it points toward and away from the substantive in question.

[22] Phillips 2004: 13-16 provides a good summary. Matilal 1985: 201-220 discusses Nyāya's theory of cognitive structure in relation to the question of perceptual error.
[23] *tadvati tatprakārakaḥ anubhavaḥ*.

The most common reason given for cognitive error is the deployment of non-applicable concepts. As all verbalizable cognition is informed by concepts, and such concepts are deployed when memory-dispositions (*saṁskāras*) are triggered, illusion often occurs when the wrong concept is applied while one is cognizing something. This misfire aims the property-hitting portion of "objecthood" away from the object of experience. This is particularly evident in the case of perception, though analogues are available for inferential, analogical and testimonial cognition. Matilal summarizes this process.

> The revived memory triggered off by the similarity of shared character brings in its wake the object of the past experience. The object of the past experience cannot enter the visual field *physically* for the eyes to see, but it can have a 'non-physical' connection (*alaukika sannikarṣa*) with the eyes to make it possible for us to perceive (i.e. misperceive). It is not an image or a shadow that we perceive in illusion. For that is not the meaning or implication of the expression 'non-physical' here. Revived memory presents the object *non-physically* to allow the sense-faculty to communicate or consider it. And in this way it appears in perception (or rather misperception) as a characteristic or a qualifier. (1985: 206) [24]

In cases where there is no apparent similarity between the object and the property ascribed, what is said to be mis-ascribed to the substantive is a relation to the false property. Later Naiyāyikas note that there are cases of illusion, like that caused by illness, where no similarity is needed to account for the ascription. Nyāya does not discuss wholesale

[24] See NB and NV 4.2.36-7 for classical references to this phenomenon.

hallucination much, but I think that it would account for it by means of the same strategy, where the substantive is the bit of space in front of one.[25]

(iv) Nyāya does not use a fairly familiar schema regarding experience and belief found in contemporary thought:

Object/fact→ experience/appearance→ belief.

Rather, Nyāya speaks of

Object/fact→ cognition (and sometimes → apperceptive cognition of previous cognition) → memory trace.

Cognitions are generally immediate knowings of what Nyāya understands to be a mind-independent external reality or, in apperception, one's own mental states. Ontologically, cognitions are considered by Nyāya to be properties (*guṇas*) inhering within individual selves (*ātmans*). Memory dispositions, when triggered, generate cognitions about the past. With a few exceptions, cognitions target things other than themselves. Apperceptive cognitions of other cognitions, assisted by memory traces, partially correspond to the role that belief plays in contemporary thought insofar as belief is produced by, reflects on, and stands in judgment of experience. Indeed, apperceptive reflection upon previous cognition is crucial for Nyāya's account of doubt and certification. The dispositional features of belief are handled by memory dispositions (*saṁskāra*), which, when appropriately triggered, give rise to mnemonic cognitions invested with certainty (*niścayatva*).

[25] This would resonate well with Nyāya's treatment of absences, which holds that they are grasped by cognizing something (e.g., a part of the floor) as qualified by an absence-of-x (e.g., an elephant.)

(v) Where contemporary philosophers commonly speak of *justifying* beliefs or showing that they are *justified*, I would suggest that Nyāya speaks of *validating* or *certifying* cognitions, showing that they are derived from a legitimate knowledge source.[26] The right kind of causal ancestry, being *pramāṇa*-born, legitimizes cognition. Veridical cognitions (*pramā*) which are uncertified count as knowledge, having been generated by a *pramāṇa*, though certain situations necessitate review and validation.

As will be further discussed below, Nyāya considers an epistemic agent to have knowledge so long as her cognition is veridical and unencumbered by legitimate doubt or dialectical challenge. *Prāmāṇya*, high-grade epistemic status, is generally glossed as veridicality (*yathārthatvam*),[27] but it also has the sense of being *pramāṇa*-produced.[28] The positive epistemic status of a cognition is therefore conferred by its being (i) correspondent to its object, and (ii) produced by a knowledge forming process. In earlier Nyāya, the two are generally thought to stand or fall together, but consideration of Gettier-like cases leads Gaṅgeśa to recognize situations where veridical cognitions arise from a lucky accident and are irresolvable into standard types of *pramāṇa*-produced cognitions. Such cognitions have the property of *prāmāṇya* in the sense of veridicality, but are not *pramāṇa*-born in the strict sense of *pramāṇa* as a factive cognition-forming mechanism which falls under recognized types.

As indicted by the foregoing, Nyāya espouses something roughly akin to a correspondence theory of truth.[29] Vācaspati Miśra (NVT 1.1.1; Anantalal 24) suggests that veridicality is a "lack of disagreement between the nature of a thing and the mode of

---

[26] See Phillips/Ramanuja Tatacharya 2004 for this usage of *certification*.
[27] *Tarkabhāṣā* 1956: 22.
[28] See various chapters in Perrett 2000 for competing interpretations of *prāmāṇya*.
[29] Here, I intend "truth" to refer to the status of cognitions, not necessarily other entities which admit of truth value. I should also note that Gaṅgeśa has problems with the notion of correspondence in this context (*yathārthatva*), as cognitions are vastly dissimilar to ordinary things.

presentation" with which it is cognized (translation by K.K. Chakrabarti (1984: 349)). As seen above, Gaṅgeśa defines veridical cognition as "an awareness-episode with predication content *x* about something qualified by *x.*" Illusory cognitions grasp something as qualified by a property it does not have. I say that this view is *roughly* akin to correspondence theories because, as intimated above, Nyāya's account of mental states does not take them to have representative content. Rather, they are directly related to objects and entities of various sorts. Should the predicative portion of a cognition's intentionality (*viṣayatā*) appropriately hit the property which qualifies the object of the cognition, the cognition is veridical. If it misses the target, it is not.

What of the normative status of a cognizer (*pramātṛ*) or epistemic agent? What makes someone a good or bad *believer*? In line with its generally reliabilist approach, Nyāya tends to avoid the language of deontology, especially regarding first-order cognitions of external facts or objects. Commonly, an agent employs *pramāṇas* in a fairly unreflective way. Nyāya locates agent-centered epistemic normativity in second-order procedures of doubt, review, and verification. I suggest that there are three main contexts in which agent-centered normativity comes to the fore.

1. In contexts of deliberate and reflective inference.[30]
2. In sensitivity to the kinds of situations and conditions that trigger doubt and review of cognition.

[30] See section 2.2 for a discussion of inference in Nyāya. What is normally translated as *inference*, *anumāna*, may be either an immediate, unreflective awareness generated by successfully navigating conceptual relations, or it may be a deliberate consideration of proof and entailment, terminating in awareness of an unperceived fact or object. The first case seems much like Dretske's (1994) notion of indirect perception as it occurs in a sub-personal, immediate way. In the latter case, agent-centered normativity has a more prominent role, since an agent must actively consider inferential relations, entailments, and defeaters. See Vātsyāyana's closing comments on NS 2.1.38, that when one infers poorly, "the fault is with the person himself."

3. In contexts of review and certification which arise post-doubt.

Regarding deliberate and reflective inference, though Naiyāyikas do not normally express positive epistemic status in deontological language, they clearly hold that one should abide by the cannons of right reasoning, avoiding *hetv-ābhāsas* (misleading faulty reasons) and recognizing defeaters of various kinds. This is underscored by the care taken in the Nyāya literature, beginning with the *sūtras* themselves, to identify fallacies and argumentative dead-ends (as seen especially in the 5th book). Moreover, it is clear that for Nyāya one *should* not trust a doubtful cognition, and is *right* to trust one which has passed review and is considered *prāmāṇya*.

The importance of sensitivity to the kinds of situations and conditions that trigger doubt and review of cognition is evinced by Nyāya's extensive discussions of epistemic defeaters of various sorts. Moreover, implicit in the treatment of doubt and review is the contention that one should be dubious of incoherent cognitive presentations and instances of incoherence within one's own cognitive structure. It is wrong to be careless or indifferent regarding such incoherence.[31] There is a core personal responsibility expected of mature, competent epistemic agents.[32] They must recognize and respond to instances of doxastic incoherence when brought to attention and likewise, be sensitive to incoherence within experience, withholding judgment about doubtful cognitions until their status has been settled.[33]

---

[31] This claim needs qualification. There are surely instances where a subject is not blameworthy for her insensitivity to relevant defeaters, owing to cognitive defects for which she is not responsible (e.g., blindness, poor training, etc.)

[32] Vātsyāyana (NB 1.1.7) suggests that animals also employ *pramāṇas* (in, one would imagine, a primitive, unreflective way).

[33] As noted above, Nyāya does not explicitly use deontological language when speaking of *pramāṇas*. But in contexts of debate, Naiyāyikas express disapproval at opponents for not abiding by what are taken to be norms of right reasoning and sensitivity to defeaters. For example, Vācaspati chides an

Finally, much of an epistemic agent's status is determined by her performance in second-order practices which involve review and confirmation of putatively veridical cognitions. If such review is carried our reasonably, according to the publicly accepted norms of rational review, one is acting as a good epistemic agent. Of course, it would be best if an account like Nyāya's, which argues that putatively veridical cognitions partake of a default positive epistemic status, gave some reason why taking things on face value is itself good. I consider this question in section 1.4. Nyāya does not endorse an internalist conception of justification which could be satisfied in Cartesian-demon worlds or brain-in-vat worlds. Though one may be doing her best in such circumstances and may be faultless from a deontological perspective, she would fail to be a *knower (pramātṛ*), since she lacks genuine *pramāṇa*-born cognitions, and therefore she does not partake of the highest normative status.

In this dissertation, I will highlight the prima facie epistemic status of a putatively veridical cognition with the term "entitlement", while the status "certified" refers to the result of successful second-level review of a disputed cognition. As both Nyāya and contemporary epistemologists employ terms like "belief", "cognition", "certification", "warrant", and "justification" to refer to roughly analogous epistemic entities, I will use such terms according to context.

1.2 *Pramāṇa* Individuation, Factivity, and Nyāya's Disjunctivism

Nyāya identifies four basic *pramāṇas*: perception (*pratyakṣa*), inference (*anumāna*), testimony (*śabda*), and analogy (*upamāṇa*) (NS 1.1.3). Each *pramāṇa* is considered an

interlocutor who rejects Nyāya's position without proper argument: "you cannot simply drive [my argument] away with a stick" (see my translation in Appendix B). In other words, rationality dictates that the opponent provides sufficient argumentation in support of his rebuttal.

irreducible process type and each process type involves a bundle of causal conditions. Most factors within such a causal nexus (*kāraṇa-sāmagrī*) are merely background conditions required for the production of any cognitions whatever and not worth specifying. The "uncommon cause" or trigger cause (*asādhāraṇa kāraṇa* or *karaṇa*), the distinctive causal condition involved in producing a type of cognition (e.g. sense-object connection for perception), is generally given the title of *pramāṇa*.[34]

Nyāya identifies knowledge sources according to what Ernest Sosa (2000: 134) calls a *particularist* methodology. Reflecting on paradigmatic instances of veridical cognition, it tries to identify the kinds of processes which produce them. Such reflection, it maintains, reveals four irreducible processes of knowledge-generation. So, Aṇṇam Bhaṭṭa (TS §40): "There are four kinds of veridical awareness-episodes, perceptual, inferential, analogical and testimonial. There are also four kinds of unique causes for each episode: perception, inference, analogy and testimony."[35] Nyāya treats knowledge sources as something akin to natural kinds and seeks to individuate them with as little ad-hoc adjustment as possible.

> Strictly speaking, we can take up any inference token and say that being an inference consists in the possession of that natural kind (*jāti*) which abides in that inference token, but not in perception. Similarly, taking up any perception token and so forth, we can say that being a perception or the like consists in the possession of that natural kind which abides in that perception

[34] See NS 2.1.21-8 for a discussion of this principle regarding the definition of perception. Uddyotakara (NV 1.1.1.; ND 18-19) provides seven ways to understand the unique causal status of *pramāṇa* for cognition. Also see *TS* §40-2, 45, 49, 65, 66 and the corresponding commentary by Aṇṇam Bhaṭṭa. Jayanta is a notable exception to this methodology, arguing that the entire causal nexus (*kāraṇa-sāmagrī*) is the *pramāṇa.*

[35] This follows Gaṅgeśa's methodology (Tarkavagish, ed. 1990: 539).

token, or whatever it is, but not in inference. (Viśvanātha, *Muktāvalī*, commentary on BP 52.)[36]

Each *pramāṇa* type is characterized by what is taken to be a natural cognitive process. The characterization of perception, for instance, begins by noting that it is a process which fundamentally involves input based on the connection between a sense faculty and an object and output consisting of cognitions which partake of phenomenal immediacy (*sākṣāt-kāritatva*). This is the initial consideration by which it may be distinguished from other *pramāṇa* types like inference. With such methodology, Nyāya anticipates Alston (2000: 360), who suggests that "there are fundamental considerations that mark out, for each process token, a type that is something like its 'natural kind."

Nyāya's approach has fairly obvious similarities to process reliabilism. Both views derive the epistemic status of belief from that of the process or causal chain which forms (or maintains) it.[37] I think that Nyāya's approach to process identification and individuation allows it to avoid the so-called *generality problem* which has been advanced against contemporary reliabilist epistemologies. The problem is motivated as follows: If a belief has positive epistemic status proportional to the reliability of the process which produces it, such processes must be specified in such a way that they do not each generate cognitions of wide-ranging epistemic status. For example, if a cognition or belief gains positive epistemic status

[36] This translation is an adaption of that given by Swami Madhavananda in Viśvanātha 1977: 82-3. Sanskrit text may be found in Sastry, ed. 1991: 211. Inherence (*samavāya*) is the relation between, among other things, a property or universal and the substance which possesses it. Though *jāti* is sometimes translated as "universal," it is useful to recognize, quoting Dravid (2001: 27), "the Nyāya-Vaiśeṣika conception of universals as real natural class-essences existing in the objective world." For reasons such as this, many, including Matilal (1986) and Phillips (1995) have treated *jātis* as akin to natural kinds. Importantly, as evinced by Mathuranātha's discussion (Ed. Tarkavagish 1990: 539), whether *pramāṇas* types are considered *jāti* (following Viśvanātha) or *upādhi* (entities which are often *jāti*-like, but which are, often for technical reasons not considered *jātis*) is immaterial. The latter is often, for our purposes, similar enough to a natural kind to allow for a similar analysis and methodology in *pramāṇa*-division. See Phillips: unpublished b for a recent discussion of this question.
[37] See Matilal 1985: 35-6, Mohanty 1999: 149, K. K. Chakrabarti 1999: 12.

by dint of its being generated by the testimony of my brother, then the relevant process ("my brother's testimony," as opposed to "the testimony of a human male" or "cognizable words") must be such as to consistently deliver true cognition (at least in the relevant context). The challenge of specifying the relevant process type is particularly difficult because reliabilists must define them in a way that is not ad-hoc, remaining fairly consistent with common intuitions. The challenge is further intensified by the fact that the causal factors involved in the production of veridical cognition are tokens of indefinitely many types and could be identified in a number of ways. It would then seem that each candidate process type may be individuated in a variety of ways, and accordingly may be attributed various degrees of reliability. Without a principled method by which the main processes are to be identified, it seems that reliabilism is a non-starter.[38]

As a matter of historical fact, concern over principled individuation of *pramāṇas* is central for Nyāya. The *Nyāya-sūtra* (2.2.1ff) engages with this question, as do many generations of commentators. Stephen Phillips (private conversation) has suggested that Gaṅgeśa's *Tattvacintāmaṇī* is organized around this question, with many sections devoted to identifying *pramāṇa* types and accounting for sub-types. I suggest that Nyāya's natural kind approach to individuation provides a principled way to avoid the generality problem. Processes are conceived of as natural cognitive functions which move from cognitive inputs (sense-object connection, the speech of a testifier, etc.) to output cognition. Therefore, the relevant process is identified according to the observable (or introspectable) features of the process itself. In this, Nyāya again anticipates Alston:

[38] For critical discussion of the generality problem, see Conee/Feldman 2000, Goldman 2000: 346, Feldman 1985: 159-74, Pollock 1986: 118-20, Plantinga 1988: 28-30 and 1993a: 198-9, and Alston 2000: 352-356.

> By virtue of being a *functional* mapping of input features onto output content, [a reliable process] has a *built in* generality that is provided by the function. . . [and] is the one defined by the function, which is in turn defined by a certain way of going from input features to output features. (2000: 363)

As seen in the citation by Viśvanātha above, for Nyāya, *pramāṇas* are identified as real-world processes which take certain kinds of inputs and produce output cognitions. By reflection upon the causal factors which operate in such processes, a core causal network may be identified as a *pramāṇa* type.[39]

Another distinctive feature of Nyāya's approach to *pramāṇas* is that *pramāṇa*-produced cognition is factive. By extension, *pramāṇas* are factive producers of cognition. It is a conceptual truth that *pramāṇas* produce veridical cognitions, as seen in the following statements. Gautama (c. 200 CE), the author of the *Nyāya-sūtra* (the school's root text) defines perceptual cognition:

> Perceptually-produced cognition arises from the connection of sense and sense-object, does not depend on language, *is inerrant*, and is definite. (*Nyāya-sūtra* 1.1.4; emphasis is mine)[40]

[39] I should note that Conee and Feldman (2000: 377) argue that individuation by natural kinds fails to resist the generality problem. They contend that process tokens may belong to many natural kinds, and therefore, there is no reason to think that such tokens belong to a single kind. Further, they argue, there is no principled way yet proposed by the reliabilist to settle the matter. This does not seem like much of a problem to me. We do tend to have a fairly good handle on the most important natural kinds to which *pramāṇas* belong for the purposes of evaluation. When gauging the reliability of my teacher's testimony, I do not become confused by the fact that it belongs to the kind "sound vibration" or "emanation from my teacher" as well as the kind "reliable testimony." We are not, as Alston (2000: 360) remarks, "awash in a sea of indeterminacy."

[40] *indriya-artha-sannikarṣa-utpannaṁ jñānam avyapadeśyam avyabhicārī vyavasāyātmakaṁ pratyakṣam.*

Vātsyāyana: "a *pramāṇa* has truth as its object" (NB 3.1.51; ND 771).[41] Uddyotakara: "That which errs is not a *pramāṇa*" (NV 2.1.37; ND 515).[42] Jayanta defines *pramāṇa* as a "cause of veridical cognition." He further argues that qualifications like inerrancy, given in the perception *sūtra* (NS 1.1.4), range over the definitions of all *pramāṇa* types.

> Someone may propose that inaccurate[43] producers of cognition could be *pramāṇas*. So to exclude producers of memory, doubt, and false cognition, three words from the perception *sūtra* (*Nyāya-sūtra*, 1.1.4), "caused by the object" (*artha-utpannam*), "inerrant" (*avyabhicārī*), and "determinate" (*vyavasāyātmakam*), should be carried over (to the definitions of all the *pramāṇa*). For they apply in general to the set of four (perception, inference, analogy, and testimony). (*Nyāya-mañjarī;* Varadacharya, ed. 1969: 73)[44]

Commenting on the term "object-possessing" (*arthavat*) in Vātsyāyana's opening phrase, "A *pramāṇa* is *arthavat* since successful action follows from *pramāṇa*-born cognition of an object,"[45] Vācaspati explains:

---

[41] *pramāṇasya tattva-viṣayatvāt.* "NB" refers to the *Nyāya-bhāṣya*, Vātsyāyana's commentary on the *Nyāya-sūtra*. "ND" refers to the *Nyāya-darśana*, a standard text of the *Nyāya-sūtra* with a number of important commentaries, listed in the bibliography under the names of its editors, Taranatha Nyāya-Tarkatirtha and Amarendramohan Tarkatirtha.

[42] *yad vyabhicāri tat pramāṇam na bhavati.* "NV" refers to the *Nyāya-vārttika*, Uddyotakara's commentary on the *Nyāya-sūtra*. The succeeding numbers refer the *sūtras* upon which the commentary is made.

[43] Monier-Williams notes that the adjective *aśuddha*, translated here as "inaccurate" is especially used to describe copyists who make mistakes.

[44] *aśuddha-pramiti-vidhāyinas tu prāmāṇyam prasajyata iti smṛti-saṁśaya-viparyaya-janaka-vyavacchedāya pratyakṣa-sūtrāt artha-utpannam iti avyabhicārī iti vyavasāyātmakam iti ca pada-trayam ākṛṣyate tad hi pramāṇa-catuṣṭaya-sādhāraṇam.*

[45] *pramāṇato 'rtha-pratipattau pravṛtti-sāmarthyād arthavat pramāṇam.*

> The word *arthavat* employs the possessive affix (*vat*), which indicates necessary linkage (*nitya-yoga*). The condition of necessity (*nityatā*) means non-deviation. The import is that a *pramāṇa* does not deviate from its object. A *pramāṇa's* non-deviation amounts to the fact that there will never be a contradiction anywhere, anytime, in any other conditions, between the nature of the object and the mode of presentation provided by the *pramāṇa*. (NVT 1.1.1; ND 3)[46]

Perception, for example, fits into a natural kind insofar as it is a specifiable type of a natural causal process that crucially involves sense faculty-object connection. But it is a different kind of process from that which produces illusion (one kind of "pseudo-perception") and is not reducible to a subspecies of a broader category like "alethically neutral cognitive process which generates apparently perceptual phenomenal character." There is thus no degree of reliability in perception. It is factive. Deviations which appear to be perceptual are not *perception*, but imitators, *pratyakṣa-ābhāsa*, "pseudo-perception." Strictly speaking, for Nyāya there is no generality problem at all, since all *pramāṇas*, which are individuated according to natural kind, are factive. They always produce knowledge.

One may argue that this approach merely generates a separate problem. By defining *pramāṇas* as factive, it has left the problem of determining the difference between a *pramāṇa* and a *pseudo pramāṇa* from a first-person perspective. Whether or not this is a distinctive problem for Nyāya (it doesn't seem to be, since everyone accepts the potential phenomenal indistinguishability of knowledge and error), it is an entirely separate question from the generality problem, which centers on the metaphysics of process-individuation.

---

[46] *tathā hi pramāṇam arthavad iti, nitya-yoge matup. nityatā ca avyabhicāritā. tena artha-avyabhicārī ity arthaḥ. iyam eva ca artha-avyabhicāritā pramāṇasya, yad-deśa-kāla-antara-avasthā-antara-avisaṁvādo 'rtha-svarūpa-prakārayos tad-upadarśitayoḥ.*

At this juncture, I need to enter into a bit of scholastic and philosophical controversy in order to defend the account given above.[47] I have presented Nyāya's *pramāṇas* as factive processes of cognition-generation. Indeed, it seems the only way to understand the passages I have provided. I have also suggested that Nyāya philosophers follow a "natural kind" methodology of *pramāṇa* individuation, citing Viśvanātha in particular. Recently, Jonardon Ganeri (2007: 351-3), working with a reliabilist conception of *pramāṇas*, has challenged such a picture.

> A picture of the sources of knowledge [as factive] seems to be at variance with a naturalist account, in which they are "natural processes" and "part of the universe's causal web." As natural organisms, we are certainly equipped with mechanisms and processes that put us in cognitive contact with the world we inhabit, processes which serve pretty well in a variety of circumstances, but are by no means infallible. (351)

> If there *are* infallible natural causal processes that generate only true awarenesses, and if these processes can be *typed* in any significant way and so made subject to causal laws and generalizations, then they must be very different in character from ordinary perception, inference, and language. I doubt that there are any naturally infallible causal cognitive processes. (353)

Ganeri insists that for the sake of consistency either the naturalism or the infallibilism about *pramāṇas* must be jettisoned. His preference is clear: get rid of the factivity requirement and keep the naturalism. His argument threatens my account particularly deeply, as I have

[47] The following passage is a summary of the core argument of Dasti and Phillips: forthcoming.

endorsed a natural kind reading of *pramāṇa* individuation. To the degree that one considers *pramāṇas* factive, he would contend, they are rather a philosopher's fancy, *unnatural* kinds.

I suggest that *pace* Ganeri, there is no incompatibility between the conception of *pramāṇas* as factive and naturalism or, for that matter, individuation by natural kinds. Many biological and cognitive processes are classified with respect to specific outcomes which are considered essential. A specific outcome—*success* from an evaluative point of view—is intrinsic to the process, a non-occurrence of which means that something other than the process proper has occurred. Sexual reproduction provides a good example. Although an act of sexual intercourse may fail to produce a child (indeed, if often does), this does not prevent us from conceiving of the outcome-inclusive "producing a child" as a natural process *par excellence*. In fact, it would be strange (and to our classical thinkers bizarre) to think of the fundamental natural process as "having sexual intercourse," which in turn has two sub-divisions, successful and non-successful child-production. One fails to understand the deep nature of the sexual act and of sexual organs without understanding their role in child-production. The successful function *is* the natural function, and is conceptually prior to the other, in that the latter presupposes the former as a counterfeit copy presupposes the real thing. Without the former, the latter would be impossible, but not the reverse. Non-child-producing sexual intercourse may be understood as an abrogation—it only exists when childbirth fails to occur. This does not entail that sexual intercourse always succeeds in producing a child but if there is genuine sexual reproduction, then childbirth does occur. Similarly, as a *pramāṇa*, perception (for example) invariably generates true cognition, although there are aberrant processes, perception-*like*, which are not the genuine item and produce false cognitions.

The term *pramāṇa* itself allows us to identify factive cognitive processes (*pramāṇa* = that which generates *pramā*, veridical cognition). By definition, if a non-veridical cognition

is generated, the productive process is not a *pramāṇa* but an abrogation, regardless of phenomenal similarity between a false and a true cognition. Indeed, our attempts to employ and identify *pramāṇa* instances are not infallible. But that we sometimes mistake an inference-imitator, for example, a *hetv-ābhāsa*, a non-genuine inferential sign for a legitimate prover (*hetu*) does not mean that the *pramāṇa* called "inference" is fallible. Discussing a failed inference, Vātsyāyana says this directly (*Nyāya-bhāṣya* 2.1.38; ND 525): "It is not the case that there is an inference that deviates. Rather, there has been no inference at all—this is erroneously considered an inference."[48] Similarly, in everyday English, "knowledge" is generally understood as factive. We say "I thought I knew. But it turned out that I was wrong." The phrase "I knew that, but I was wrong" strikes us as bizarre. In Nyāya's terms, it violates *yogyatā*, semantic appropriateness. We do not use the word "knowledge" or its variants in regards to error; the word has a success grammar. Yet few people think of knowledge as a philosophers' fancy. The same holds for *pramāṇa.* "My cognition is *pramāṇa*-produced, but it is false" is a precise parallel which also violates semantic appropriateness. A *pramāṇa* invariably produces cognition whose objecthood (or intentionality) hits the mark. Clearly, Nyāya does not hold that we are infallible judges of whether a *pramāṇa* or a mere imitator has occurred. The factivity of *pramāṇas* is not, therefore, deployed by Nyāya as a magical bulwark against skepticism or in any other way that unjustifiably appeals to the success grammar of the concept.

Nyāya's factivity requirement on *pramāṇas* entails that there are many seeming *pramāṇa* occurrences which are strictly speaking non-*pramāṇas*, as they fail to hit the mark. This is a central feature of Nyāya theorizing about knowledge, finding expression in the

[48] *na ayam anumāna-vyabhicāraḥ, ananumāne tu khalv ayam anumāna-abhimānaḥ.*

notion of *pramāṇa*-*ābhāsa*, "*pramāṇa*-imitator", or "semblance of a *pramāṇa*."[49] To me, this distinction is a first indication of Nyāya's affinity toward epistemological disjunctivism, a thesis that will be explored in the final section of this chapter. The upshot of this distinction is that phenomenal similarity between mental states does not entail ontic similarity. Though error may be mistaken for knowledge, the two are fundamentally distinct.

Accounts of *pramāṇa-ābhāsa* are fairly pronounced in the early Naiyāyikas. After speaking of *pramāṇa* as that which produces "definitive ascertainment of an object" (*artha-paricchedaka*) Uddyotakara (*Nyāya-vārttika* 1.1.1; ND 7-8) notes that a second thing, an impostor of a *pramāṇa* (*pramāṇa-pratirūpa*), exists. This impostor is called *pramāṇa-ābhāsa*, a pseudo-*pramāṇa* or semblance of a *pramāṇa*, and is differentiated from the genuine article in that *pramāṇa* is *arthavat* (factive) while the *ābhāsa* is *anarthaka* (useless or errant).[50] The latter is spoken of under the heading of *pramāṇa* only in a figurative sense (*pramāṇam ity upacaryyate*).

Commenting on Uddyotakara, Vācaspati elaborates upon the relationship between the two.

> It is wrong to hold that "a *pramāṇa* may be factive or errant." The idea of an errant *pramāṇa* is a contradiction.[51] Therefore, he explains "Inasmuch as it prompts definitive apprehension of an object, it is a *pramāṇa*."

---

[49] The word *ābhāsa* is produced by the combination of the affix *ā*, which commonly has the sense of hitherward movement, to the verbal rood √*bhā* which has the sense of brightness, illumination, manifestation and appearance. *Monier-Williams* notes that within *ābhāsa's* semantic range are "appearance," "semblance," "phantasm of the imagination," "mere appearance," and "fallacious appearance."
[50] Its uselessness chiefly consists in the fact that it cannot lead to successful activity (*pravṛtti-sāmarthya*).
[51] Udayana glosses this wrongness (*ayuktam*) as "being unestablished by *pramāṇas*" (*apramāṇikam*) and takes the contradiction (*vipratiṣiddha*) to be a kind of logical inconsistency. See Anantalal, ed. 1996: 31.

[Question:] But a non-*pramāṇa* (or *pramāṇa-ābhāsa*) which is cognized as such is not able to prompt activity.[52] How does it do so?

[Answer:] It is mistaken to be a *pramāṇa*. Without similarity to *pramāṇas*, there would be no mistaking a non-*pramāṇa* for a *pramāṇa.* Uddyotakara asks "what is the similarity?" His answer is that they both provide definitive ascertainment of universals.[53]

And:

The [erroneous] cognition of a piece of silver provides a distinct presentation of a real substantive in front of one which possesses whitish color. The [veridical] cognition of a shell does too.[54] The idea is that there are two cognitions in relation to a single object. One cognition projects silver [where it is lacking], while the other serves as a corrective [as it presents the object as it is]. They relate to each other as the sublated and the sublator. The impetus to act follows from both of them. But the *pramāṇa* alone leads to

---

[52] This is considered a problem because Nyāya holds that one way to distinguish between a genuine *pramāṇa* and a mere *pramāṇa-ābhāsa* is that actions performed under the guidance of the former tend toward success while the latter tend toward failure. But if we are able to recognize the appearance of a pseudo-*pramāṇa* as it arises, we would not act on it, knowing it to be fallacious, and the above method to distinguish the two would be useless. The obvious response, which accords with common experience, is that from the subject's perspective, they are often indistinguishable.

[53] *pramāṇasya arthavad anarthakatvād ity ayuktaṁ pramāṇam anarthakam iti hi vipratiṣiddham ity ata āha pramāṇaṁ tāvad iti. na tv apramāṇam apramāṇam iti gṛhītaṁ pravṛttyai kalpate kiṁ tarhi*? *pramāṇam iti. na ca apramāṇe pramāṇam ity abhimāno vinā pramāṇādi-sādharmyād iti tatsādharmyam pṛcchati kiṁ punar iti. uttaraṁ sāmānya-paricchedakatvaṁ tadvṛṇoti pramāṇena api iti.*

[54] A stock example of perceptual illusion in Indian thought involves seeing an oyster shell from a distance and mistaking it for a piece of silver.

success in action, while the *non-pramāṇa* does not, as it deviates from its object.[55]

This passage highlights the relationship between *pramāṇa* and *pramāṇa-ābhāsa,* indicating the bases of both similarity and difference between them. Regarding similarity, first, they both target a real feature of the world, a genuinely existing thing (*sad-dravya*). Second, they both present something as qualified by general features (*sāmānya*). In many cases of illusion, there is a shared universal which is the basis for the error. In Vācaspati's example, both silver and oyster shell reflect light with a whitish color (*śukla-bhāsvara*). In the observer, this similarity triggers a memory trace of silver, which is mistakenly deployed in reference to the shell.

Regarding difference, first, the genuine *pramāṇa* cognizes an object as qualified by a property it actually has (shellhood, etc.), while the *ābhāsa* cognizes it has qualified by a property it lacks (silverhood, etc.). Second, given that their deep relationship (*bhāva*) is that of sublator-sublated, there is something parasitical about the *ābhāsa*. It presupposes the former as an impostor presupposes the genuine article, and is conceptually dependent upon it. To recall the example given above, sexual intercourse which fails to produce a child may be understood as an abrogation of the real thing.

Importantly, not all errors or non-*pramāṇic* cognitive states are *pramāṇa-ābhāsa*, as not all are deceptive. In cases of doubt (*saṁśaya*), where one is hesitant to ascribe truth to the content of one's experience, one does not mistake a false cognition for a genuine one, and no *ābhāsa* occurs.

---

[55] *rajatādi-jñānam api puro-varti-śukla-bhāsvaraṁ sad-dravyaṁ paricchinatti śukti-jñānam api. kevalam ekasmin eva viṣaye rajata-samāropa-apavādābhyāṁ budddhyor bādhya-bādhaka-bhāva iti bhāvaḥ. tad evam ubhayataḥ pravṛttiḥ samarthāt pramāṇād eva na apramāṇād artha-vyabhicārin iti.*

Nyāya thus prioritizes veridical cognition, and understands illusion and mistake as conceptually parasitical upon such cognition.[56] Given that Nyāya offers a disjunctive account of *pramāṇa*- and pseudo *pramāṇa*-born cognitions, cognitions are either "in" or "out", so to speak. To certify that a cognition's content is veridical, or in the language of Nyāya that its objecthood hits the appropriate object and/or property, one needs to ensure that it was generated by a properly-functioning knowledge source, in which case the cognition is confirmed as veridical and indeed may be embraced with confidence.

Nyāya may be said to hold a "threshold theory" of positive epistemic status, not a "degree theory." At first glance, this notion conflicts with the fairly common view that justification or warrant comes in degrees, a position supported by reflection on standard epistemic practices.[57] We take the deliverances of our knowledge sources to have various degrees of justification, warrant, etc., and accordingly, we take a nuanced view of the beliefs they produce. Some are held with great confidence, others engender no confidence, and yet others fall into a middle range. An unnuanced threshold theory would fail to do justice to this practice.[58] Happily, Nyāya does not deny that we have varying degrees of confidence in cognitions as they manifest. Though there is ultimately a disjunctive account of *pramāṇa*-born vs. non-*pramāṇa*-born cognitions, such status manifests itself with varying force. This insight is incorporated into a theory of doubt (*saṁśaya*), which provides the conditions under which cognitions within a certain range must be reviewed to ensure that they truly are *pramāṇa*-born and belong in the privileged circle. I will examine this theory in more detail in the next section. I will postpone a consideration of problems and challenges regarding

---

[56] Compare McDowell (2008: 380): "Experiences in which it merely looks to one as if things are thus and so are experiences that misleadingly present themselves as belonging to that epistemically distinguished class [where one sees things as they are]."
[57] Plantinga 1993a: 4, 109-110 and Alston 1999: 223.
[58] Oetke (2003) considers this rigidity a serious flaw of *pramāṇa*-theoretic epistemology.

process individuation until we have considered Nyāya's theory of second-order certification. Finally, the details of *pramāṇa* typing will be discussed at length in chapter two.

1.3 Certification—Nyāya's Internalist Constraint

Nyāya's attitude toward knowledge sources is one of default trust, not skepticism or methodological doubt. Putatively veridical cognitions, which correspond to the contemporary notion of presentations or appearances which arise *as true*, are prima facie entitlements,[59] to be considered veridical unless legitimate doubt or challenge arises. Vātsyāyana (NB 1.41) remarks that definitive ascertainment (*nirṇaya*) does not require review and defense of a cognition; sense-perception or testimony (for example) suffice to produce veridical cognition—knowledge—in the absence of reasons for doubt.[60] Definitive ascertainment is simply the result of a *pramāṇa's* functioning (*nirṇayas tattva-jñānaṁ pramāṇānāṁ phalaṁ*) (NB 1.1.1; ND 56). Uddyotakara (NV 1.1.1; ND 20) claims that awareness of an object inspires us to act, not awareness of the *pramāṇa* instance which grasps the object. Gaṅgeśa (Phillips/Tatacharya 2004: 139) argues that certainty (*niścaya*), a synonym of ascertainment (*nirṇaya*), and a requirement for unhesitating action (*niśkampa-pravṛtti*), requires only a cognition's being unblemished by the suspicion of doubt. He further notes that "where doubt does not occur concerning non-veridicality, an original cognition itself is an *ascertainment* of an object (i.e. is itself a bit of certitude)" (slightly modified version of Phillips' translation, Phillips/Ramanuja Tatacharya 2004: 130).

[59] That is, an individual is entitled to believe them without violating any epistemic duties.
[60] As it consists in a cognition accompanied by a strong feeling of assent, *nirṇaya* is among the best candidates for a Sanskrit analogue of *belief*. Uddyotakara (NV 1.1.40; ND 332) defines *nirṇaya* as follows: "*nirṇaya* is a definitive ascertainment (*avadhāraṇa*) which discriminates an object (*artha-pariccheda*)."

Under specified conditions an entitlement loses its default status and is beset by doubt (*saṁśaya*). Should the subject wish to defend the now doubtful cognition, she must validate it. She must demonstrate (at least to herself) that it is genuinely *pramāṇa*-born. This requirement for review is an accessibility requirement which tempers Nyāya's externalism.[61] The access in question need not be explicit or concurrent with the generation of the relevant cognition. It is often triggered by conditions for reasonable doubt or legitimate dialectical challenge. Nyāya thus locates epistemic responsibility or doxastic responsibility in sensitivity to appropriate types of doubt-generators and an appropriate response to such doubt.

I think that the "Default and Challenge" conception of justification, championed by Michael Williams, is a useful way to frame Nyāya's notion of entitlement and certification.

> Entitlement to one's beliefs is the default position; but entitlement is always vulnerable to undermining by evidence that one's epistemic performance is not up to par. Faced with such a challenge, one can retain entitlement only by producing evidence in favour of one's beliefs or the reliability of one's methods.[62] (Williams 2001: 25)

As we have seen, corresponding to the default aspect, Nyāya endorses a prima facie entitlement to putatively veridical cognitions. Corresponding to the challenge aspect, Nyāya

---

[61] What commonly distinguishes reliabilist or externalist epistemologies (within which I am situating Nyāya's *pramāṇa* theory) from internalist epistemologies is the denial that one needs to reflect upon one's beliefs or on the status of evidence for such beliefs in order for them to have high-grade positive epistemic status or count as knowledge. An accessibility requirement, then, is a notion championed by internalist epistemologies, which holds that some personal access to one's evidence, etc. is a requirement on knowledge. See Pappas 2005 for a discussion of accessibility requirements.
[62] I am not suggesting that anything more than this part of Williams' epistemology is a useful analogue for Nyāya. I think that Williams is more of an internalist than Nyāya, but, as he himself notes, the default and challenge notion of justificational practice is amenable to both internalism and reliabilism.

articulates a theory of doubt (*saṁśaya* or *vimarśa*). Doubt triggers a second-order concern with reflective inquiry and certification. "Where there is doubt, there must be ongoing examination" (NS 2.1.7).[63] With this feature in mind, Uddyotakara claims that doubt is an essential component of investigation (*vicāra-aṅga*) (NV 1.1.23).[64] "While there is no rule (*niyama*) that doubt must precede definitive ascertainment (*nirṇaya*), it must precede investigation (*vicāra*)" (NV 2.1.1).[65] Reflecting on the traditional ordering of Nyāya's topics of study, (NS 1.1.1), Udayana suggests that doubt is listed before the individual steps of reasoning because doubt is itself the occasion for self-conscious reasoning (NVTP 1.1.23). Vātsyāyana (NB 1.1.1) notes that self-conscious reasoning is not directed toward unknown things or things definitely known, but to things which are apprehended in an uncertain way.

The structure of the *Nyāya-sūtra* itself illustrates a somewhat formal approach to doubt as part of a rule-bound discussion or debate, often following the following schema: (i) introduction of a philosophical issue, (ii) elucidation of reasons for doubt in the standard Nyāya position, including considerations in support of opposing positions, and (iii) resolution of the doubt by deployment of the *pramāṇas* and *tarka* (counterfactual reasoning). As noted above, in his introduction to the *Nyāya-sūtra*, Vātsyāyana (ND 35) considers such cognition-review and confirmation the distinctive business of Nyāya: "Nyāya is the investigation of a subject by means of *pramāṇas.*" He further explains what he means by investigation: "the re-knowing of that which is already known by perception and authoritative testimony."

---

[63] *yatra saṁśayas tatra evam uttara-uttara-prasaṅgaḥ*. I have translated the verse according to Udayana's interpretation. Other commentators differ in their account of its import.
[64] He later calls it "an essential component of investigation," *parīkṣā-aṅga*, for similar reasons (NV 2.1.1).
[65] Gaṅgeśa notes an exception to this principle. Those who love philosophy may reflect on their core holdings without being triggered by doubt.

Despite the formal approach to doubt within the structure of the *Nyāya-sūtra*, its definition of doubt centers on the practice of individual epistemic agents.

> Doubt is a wavering awareness, in want of a distinguishing cognition, produced by cognition of common property, of an uncommon property, or by conflicting opinion, which are qualified by uncertainty regarding cognition and non-cognition. (NS 1.1.23; ND 234)[66]

Generally, a doubtful cognition is typified as having predication content amenable to various, incompatible objects, ascribed to a single locus, coupled with an inability of the subject to apprehend a property unique to one of the options that would settle the case.[67] A stock example of a doubtful cognition is the perceptual presentation of something in the distance that could be either a person or a post. Uddyotakara argues, following the *sūtra*, that in cases like this, there are three individually necessary and jointly sufficient conditions for doubt. (i) Lack of awareness of the uniquely distinguishing property of something present to consciousness, (ii) awareness of its being qualified by a property compatible with various, exclusive, property-bearers, and (iii) lack of certainty from cognition or lack of cognition which could settle the case.[68] Doubt triggers a move to validation, as a cognition to which

---

[66] *samāna-aneka-dharma-upapatter vipratipatter upalabdhi-anupalabdhi-vyavasthātaś ca viśeṣa-apekṣo vimarśaḥ saṁśayaḥ.* In my translation, I have followed Uddyotakara's interpretation.

[67] See *Tarkasaṁgraha* §71 and *Tarkabhāṣā* § 128. Unlike illusion which gets the qualifier wrong, doubtful cognitions don't allow one to make a definitive judgment whatever. See Phillips/Ramanuja Tatacharya 2004: 88-9. *Vaiśeṣika-sūtra* 2.2.17 notes that doubt follows from apprehension of general characteristics of an object, without apprehension of specific differentia, coupled with the recollection of competing options by which the object may be characterized. A good overview of the status of doubt in Nyāya-Vaiśeṣika is found in Potter 1977: 170-2.

[68] While the third condition may seem superfluous, Uddyotakara and Vācaspati offer the following example in its defense: A person visually apprehends a tree at close range. After distancing himself from the tree, he now sees it as something tall but otherwise unclear. He no longer apprehends the properties which distinguish it, and he does apprehend a property which it shares with other things

one is entitled by the (presumed) operation of a *pramāṇa* loses such entitlement in the face of doubt. Śrīdhara (Jhā, trans. 1982: 366) notes that "the premise that leads to the true conclusion is rendered as much futile by a doubt to the contrary as by a distinct contradictory cognition."

Vipratipatti, opposing views, recognized in the *sūtra* as the third trigger for doubt, is of special interest to this dissertation. Uddyotakara states that in cases of doubt caused by conflicting opinion, as opposed to something like the perceptual unclarity above, contrary opinions or assertions take the place of (ii) (awareness of its being qualified by a property compatible with various, exclusive, property-bearers). It is interesting that Vātsyāyana uses the word *darśana* for "opinion" in this context, suggesting a philosophically-informed perspective, and not a mere opposing view.[69] His example:

> One school holds that there is an indwelling self (*ātman*). Another holds that there is no indwelling self. It is impossible that both obtain simultaneously, and in the absence of a proof (*hetu*) in support of either one, there is an absence of definitive ascertainment of the truth, which constitutes doubt. (NB 1.1.23; ND 241)

This brings up a number of questions. If Nyāya considers conflicting opinion a reason for doubt, given the ubiquity of opposed opinions amongst classical Indian thinkers, it could lead to a kind of philosophical skepticism of the sort developed by Feldman (forthcoming):

(tallness). In this, the first two conditions are met. But no doubt arises, since his former decisive cognition prevents uncertainty.

[69] The word *darśana* is often used to refer to a system of thought (e.g., *nyāya-darśana*, *mīmāṁsā-darśana*).

> There are cases in which one is tempted to say that 'reasonable people can disagree' about the matter under discussion. In those cases, I think, the skeptical conclusion is the reasonable one: it is not the case that both points of view are reasonable, and it is not the case that one's own point of view is somehow privileged. (441)

This view is, however, not embraced by Nyāya which in practice maintains entrenched opposition to other schools and thinkers who are have similar philosophical acumen (indicating that they are likely to be epistemic peers), and who usually remain unconvinced of Nyāya's position. Naiyāyikas do tend to hold that reasonable challenge demands response. But I have not found much discussion in the classical sources which elucidate and defend a position on what exactly constitutes a reasonable challenge or when a challenger may be ignored without violating epistemic norms. Clearly, challenges which conform to the classically-accepted notions of *pramāṇa*-defeaters are legitimate. Other challenges, and particularly certain kinds of skepticism, as discussed below, are held to be unreasonable. Still, Nyāya does respond to them, and tries to illustrate why they are unreasonable.

Commenting on NS 2.1.6, Vātsyāyana and Uddyotakara seem to indicate that given diversity of opinion, individual parties who are well informed and put forth well-supported opposed views are not necessarily beset by doubt. Nor, it is implied, should they be on pain of irrationality. Rather, it seems that uninformed or under-informed third parties (Viśvanātha calls such persons *madhyastha,* neutral observers) are especially required to review their belief in light of opposition. Of course, challenges may target individual planks of a school's defense of a position, planks which are weakly supported, necessitating review, defense, and (likely) further debate.(Much of the later chapters of this dissertation will illustrate this

process.) But Nyāya seems to hold that opposition to a position which has been successfully defended (in context similar to the opposition) need not trigger doubt unless relevant objections to undefended or underdefended aspects of the position arise.

The following is a summary of the primary post-doubt methods of review and validation recognized by Nyāya:[70]

1. *Inference from successful action*. Historically, this method is paramount. Vātsyāyana begins his commentary on the *NS* with the declaration "a *pramāṇa* is considered effective because successful action follows from a *pramāṇa*-generated cognition of an object" (*pramāṇataḥ artha-pratipattau pravṛtti-sāmarthyāt arthavat pramāṇam*). [71] Nyāya's realism, which accepts the existence of a mind-independent world, supports this approach. The underlying assumption is that accurate reports about the world are a necessary condition to navigate oneself successfully around it. Let me note that this criterion is almost always appealed to in support of a *pramāṇa* token (though some have suggested that it may be appealed to illustrate the excellence or reliability of a *pramāṇa* type).[72] This approach seems to be supported by common doxastic practices. Regarding a *pramāṇa* token, testimony in the form of driving directions is validated when one successfully reaches her destination by following them. This method of certification depends on much of our common activities

[70] These are, to my knowledge, never provided together in a comprehensive list. They are found scattered throughout Nyāya's treatment of validation. See Chakrabarti 1984: 345ff., Matilal 1986: 164-79 and Phillips/Ramanuja Tatacharya 2005: 9 for discussion of some of the methods outlined below.

[71] Uddyotakara provides a simple account of success in action: "thinking 'I want something desirable', someone acts. If he achieves his aim, it is successful. Thinking "I want to avoid something undesirable," one acts. If he avoids it, it is successful. When there is the opposite, it is unsuccessful." (ND 7.) See K. Chakrabarti 1984: 347-50 for further discussion of this notion.

[72] Ganeri (2001: 152) suggests that "Like Sosa, the Nyāya understanding of reflective knowledge sees it as derived from an explanatory inference. The epistemic agent is entitled to have confidence in her beliefs *and belief-acquisition procedures* because, or to the extent that, actions performed in agreement with the beliefs so produced meet with successful outcomes. The accord between belief and success in action is the basis for a perspective on one's global epistemic 'set up', and it is also the warrant for local belief in the truth of individual beliefs" [italics are mine].

taking place according to uncertified or even doubtful cognitions.[73] Indeed, we commonly act on the presupposition that the putative deliverances of knowledge sources that guide us are accurate, and through a history of success and failure, we develop a sense of when we should take them as the genuine article and when we should recognize that they are not. *Tarkabhāṣā* §76 provides a formal example of an inference from successful action: "That cognition of water which is disputed is veridical, since it is productive of successful effort (*samartha-pravṛtti-janakatvāt*). That cognition which is not veridical does not produce success in action, like that of a pseudo-*pramāṇa*."[74] In this case, success is used to support the veridicality of a single cognition, though as alluded to above, it seems that it could be used to support a knowledge source more generally by appeal to its track record. More precisely, it could be used to support that a putative knowledge source is in fact a reliable instance of a given *pramāṇa* (e.g., my mother is in fact a good source of testimony).

Though leading to success in action is an indicator of veridical cognition, it is important to remember that it is not the *definition* of veridicality. While Nyāya's primary test of truth is pragmatic, its definition of truth is not. Nyāya's definition of veridicality focuses on correspondence between the predication content of an awareness and the properties of the thing apprehended in the awareness. Leading to success in action is taken to be the best evidence that cognition accurately represents reality. Udayana points out that a cognition's veridicality is *inferred* from its producing successful action (*prāmāṇyam hi samartha-*

[73] "Sometimes a person acts on the basis of a doubtful cognition, and later, finding water or the like, determines that the original cognition was veridical. This is the actual state of affairs" (*kaścit tu sandehāt pravṛttaḥ pravṛtti-uttara-kāle jalādi-pratilambhe sati prāmāṇyam avadhārayatīti vastu-gatiḥ*). Tarkabhāṣā, ed. Iyer 1979: 150. Jayanta thinks that ordinarily people tend to operate according to mere probability and that only later such probable or doubtful cognitions are verified. But Jayanta has a less robust notion of prima-facie justification than most Naiyāyikas, as he even classifies merely unconfirmed cognition as a kind of doubt. See Potter 1977: 367 and Bijalwan 1977: 55.

[74] Note that this formulation is in the "exclusionary form" (*vyatirekī*), which cites the *vyāpti* of the absence of the probandum by the absence of the probans. This is done in order to avoid the charge of circularity by a skeptic. Even a skeptic should allow that non-veridical cognitions exit, and would therefore accept the example (*dṛṣṭānta*) of a *pramāṇa-ābhāsa* that leads to unsuccessful action. See section 2.2 for more discussion of this argument form.

pravṛtti-janakatva-anumeyam). This, as noted by K.K. Chakrabarti (1984: 349), underscores the distinction between the test of truth and the nature of truth. Skeptical challenges to this procedure (including the obvious charge of circularity) will be discussed further below.

2. *Inference from likeness.* This method is parasitical on the first kind. An inference from likeness (*tat-jātīyatā*) involves classifying certain types of cognitions as relevantly similar to those which one has verified in the past. What the cognitions share is their objecthood; they both target the same kind of intentional object or fact. As the type of object or fact has been established by former cognitions, later cognitions which target it (in the relevant circumstances) have a kind of initial certified status. Phillips (2004: 127) provides a summary of the practice:

> Once we are familiar with a type of cognition and know other instances to be veridical—e.g., of something exhibiting hands and feet, or, of the appearance of water in a certain environment—we can be sure of a later instance's veridicality *without* checking. The second time we see the river in the distance, we need not bathe and so on to know that the river cognition is veridical. Thus, while pragmatic verification is the ultimate touchstone, it is not the only way we can know veridicality.

Matilal (1986: 165-6) and Phillips (2004: 9) have classified inference from likeness as a validational practice. I don't wish to dispute that analysis, though I think that there is a distinction between it and other validational practices. Such practices generally arise after doubt and aim at securing the status of a putative *pramāṇa-born* cognition. They also involve conscious, reflective inference. But inference from likeness is often automatic, and not a

response to doubt. Gaṅgeśa suggests that it is commonly triggered by an apperceptive awareness of the original cognition. Validation by likeness involves a conceptual connection between facts which is so deeply internalized that one does not normally make conscious inferential steps. The intentional object in question (an intentional object of the relevant type) has been certified with success in the past, and one apperceptively *sees* the cognition in question as veridical. The veridicality of such cognitions is of course still challengeable. But the bar for doubt has been raised by dint of awareness of previous historical successes.[75]

3. *Determination of a cognition's etiology.* This method it is a subtext of Nyāya's entire epistemological project.[76] It involves reviewing the causal factors involved in the production of cognition to ensure that an awareness episode was indeed the produce of a genuine *pramāṇa*. Later Naiyāyikas discuss this as a search for the presence of positive epistemic qualities (*guṇas*) and an absence of epistemic faults (*doṣas*) within the causal process which gives rise to a cognition in question.

Since this practice requires data that is amenable to investigation, it is more commonly discussed in cases of inference than perception, for example, where the causal mechanism is not easily reviewed (and often not reviewable at all).[77] It is standard practice in dialectical situations to examine meticulously each step of an inference which one has produced to ensure that it is free of errors. One may also do this while inferring for oneself. Regarding testimonial cognitions, in the face of reasonable challenge, one may review the qualifications of a testifier, whose statement was originally accepted owing to default trust

[75] Matilal 1986: 165-6 provides a concise exposition of inference by likeness, suggesting (along with Potter 1977: 158-9) that Vācaspati was the first Naiyāyika to make this point clear. Also see Gaṅgeśa (Phillips/Ramanuja Tatacharya 2004: 125-7).
[76] Jayanta (Bhattacharyya, trans., 1978: 362) makes this particularly explicit. See NB 2.1.20 as well.
[77] Stephen Phillips (private correspondence) has noted that Naiyāyikas do discuss some indications provided to indicate that one's perceptual faculties are impaired, including the sickly pallor of a jaundiced person.

and prima facie lack of defeaters, to ensure that he is truly *āpta*, authoritative regarding the subject matter. In the case of cognitions which "arrive" as doubtful, this kind of review is generally not applied since the original cognition is itself unclear, hence not *pramāṇa*-born. In such a case, the immediately following methods would likely be applied.

4. *Verification by other pramāṇas.* This is normally called *pramāṇa-samplava*, "convergence of *pramāṇas*," and consists in the support of a cognition produced by one *pramāṇa* by that of another. Sometimes cross-*pramāṇic* re-cognition is not conformational. I may see my wife in our car after hearing her say that she was going out for a drive. Since the latter was not in doubt, the former does not confirm it as much as strengthen the already secure status of the original testimonial cognition, inoculating it from later doubt. But in other cases there is a conformational aspect of such convergence. In order to confirm that I did indeed see my friend in the stands of a game I saw on television, I call him. He answers in the affirmative. A testimonial cognition thus supports the original perceptual cognition.

One kind of cross-*pramāṇic* confirmation consists in the reconfirmation of a token cognition by another cognition of the same *pramāṇa* type. Udayana calls this *sajātīya-saṁvāda*, concordance with what is of the same kind.[78] Confirmation by success in action seems to be a special case of *pramāṇa-samplava*, which is highlighted by Nyāya due to its pragmatic importance for epistemic agents.

5. *Deployment of tarka. Tarka* (suppositional or dialectical reasoning) is a method of argumentation which is crucial to Nyāya's philosophical program. Still, according to Vātsyāyana (NB Introduction), it is only an assistant to the *pramāṇas* (*pramāṇa-anugrahaka*), not an independent knowledge source. It is commonly employed as a kind of

[78] See K.K. Chakrabarti 1984: 345-6.

reductio argument for the sake of judging competing claims or arguments; a *reductio* which trades not only on logical inconsistency but on incoherence with deeply held beliefs or norms of various kinds. In the face of competing claims *x* and *y* about subject *s*, *tarka* is employed to show that *x,* for example, violates such norms, thereby shifting the presumptive weight to alternative *y.* In support of the status of a doubted cognition, it may show that denying the cognition's veridicality may result in undesirable consequences.

In closing this section, I'd like to mention that although I previously noted cognitions are either "in" or "out" for Nyāya, this is nuanced by Nyāya's theory of doubt and review. Cognitions which have successfully passed review are still "in," but have been comparatively immunized to doubt. The bar for doubting them has been raised.[79] I should again underscore the limits of review and certification. Animals and small children can have veridical, *pramāṇa*-born cognitions—hence, knowledge—though they are incapable of certifying them. They are, therefore, incapable of the full epistemic excellence and increasing cognitive effectiveness of fully rational agents, to whom are enjoined more stringent epistemic standards. Another qualification is warranted: Context also impinges upon the question of review. Jayanta (1969: 481) notes that regarding common endeavors which are easy to undertake, cognitive review is not as important as those in which the endeavor is strenuous or the stakes are higher in some other way. His notion can be developed into a contextualist condition on the criteria for review.[80]

[79] In support of such practice, Vātsyāyana (NB 3.2.55; ND 815) defends a section of the *Nyāya-sūtra* which retreats topics settled earlier, claiming "As truth is repeatedly investigated, it becomes more established" (*bahudhā parīkṣyamāṇam tattvaṁ suniścitataraṁ bhavati*).

[80] Recognizing the two levels of epistemic practice in Nyāya, Patil 2009: 33-52 argues that its approach is "bivalent": its theory of knowledge (corresponding to what I am calling the "default" level) is reliabilist, while its theory of justification (which Patil considers the distinctive province of what I am calling the "challenge" level) is an internalist foundationalism. His interpretation is insightful in that he recognizes that on the second level, agent-centered normativity comes to the fore: one is self-consciously concerned with abiding by the norms of correct reasoning. On the whole, his interpretation of Nyāya's epistemology is most cogent. Nevertheless, I would disagree with the categories within which Patil places Nyāya theory. First, I would suggest that justification is conferred

1.4 Grounds for Default Entitlement

As seen above, Nyāya's epistemology conforms to a default and challenge schema. Putatively veridical cognitions are endowed with initial positive epistemic status, and are reviewed and defended in the face of doubt or legitimate challenge (or if, as Gaṅgeśa notes, one simply enjoys philosophical exercise). Our next question is what, if any, are the considerations which provide such immediate, default status to putatively veridical cognitions?[81] Amongst contemporary philosophers, some theorists have provided considerations meant to support prima facie entitlements. I'd like to consider a few of them in order to map some of the conceptual space within which we will operate.

Michael Williams: *the default and challenge model is the best model for the dialectical space in which beliefs are held and defended.* Williams (2001: 148ff) argues that that his account, which allows for default entitlement of unchallenged beliefs, provides a better articulation of the dialectical space in which beliefs are actually held and defended than skeptical or evidentialist approaches.[82] Williams does not appeal to phenomenology, the nature of cognitions which arise "as true," or the nature/reliability of our belief-forming mechanisms. He does, however, argue that his account accords better with our common

---

by first-level functioning of *pramāṇas*, and is not restricted to the province of post-doubt review. If one asks "why do you believe that Jim is in town?" I may answer that I just saw him at the store. In this case, there is no second-order reflection. Still, there is justification, as my belief that Jim is in town is justified or reasonable owing to its being perceptually produced. Second, as Nyāya reduces inference to a reliable process, whether self-conscious or not, on the second level, it is still a reliabilism. Third, Nyāya is not foundationalist in a robust sense. Its foundationalism consists in a default presumption of innocence for putatively veridical cognition. And this exists in both the first and second levels.

[81] I should note that here we are considering the default status of individual cognitions. Later, we will consider the status of entire *pramāṇa* types as knowledge sources and how they are supported.

[82] Evidentialism is the notion that awareness of evidence for one's beliefs is central in epistemic justification/knowledge. Unlike reliabilism or less robust kinds of internalism, it tends to make reflective awareness to the basis of one's beliefs a primary justification-conferring feature.

epistemic practices than those accounts which require prior grounding for a belief to be properly held (in Indian discourse, such practices would be said to reflect *vyavahāra*, common usage). Moreover, he argues against the *prior grounding requirement*, that all (epistemically) responsible believing is based on supporting evidence possessed by the epistemic agent. Williams notes that the *prior grounding requirement* has the effect of saddling claimants to belief with various obligations but providing none for challengers to belief. Asking "How do you know?" is always considered legitimate. In contrast to this, the *default and challenge* conception saddles both claimants to beliefs and challengers to belief with responsibilities. This, he holds, is a virtue of the conception. Finally, Williams argues that the default and challenge approach to justification is pragmatically superior. We are interested in epistemic evaluation to further our ability to pursue our pragmatic goals. Since the *prior grounding requirement* tends to lead fairly straightforwardly to skepticism, it conflicts with the core motivations for epistemic evaluation.

Pryor: *the phenomenal force of experience grounds default justification.* Jim Pryor (2000: 536) claims that for a large class of propositions, "it's intuitively very natural to think that having an experience as of that proposition justifies one in believing that proposition to be true" in a way that "doesn't seem to depend on any complicated justifying argument." He contends that mere appeal to philosophical conservatism[83] is enough to support this view, but further suggests that the *phenomenal force* of such experience underwrites the prima facie justification in question. The idea of phenomenal force is a little vague, but he summarizes it as the idea that "experience represents propositions in such a way that it 'feels as if' we could tell that those propositions are true—and that we are perceiving them to be true—just

[83] Philosophical conservatism, as understood by Pryor, is the notion that when analyzing concepts or defining terms we start with what seems intuitively natural to say about the thing in question and retain that view unless suitable objections arise. See Pryor 2000: 547 n.37.

by virtue of having them so represented" (2000: 547). This is illustrated by the contrast between the feel of experience vs. the feel of daydreaming.

Burge: *the default entitlement due to testimony is a product of its being prima facie received from a rational source and due to the connection between being contentful and having a prima facie connection to truth.* The most developed account that I have found of the theoretical underpinnings of entitlements is Burge 1993. Burge's discussion centers on testimony, and what he calls the *Acceptance Principle*, which sustains the prima facie entitlement accorded to testimonially produced beliefs. The form of justification associated with this principle is:

> A person is apriori entitled to accept a proposition that is presented as true and that is intelligible to him, unless there are stronger reasons not to do so, because it is prima facie preserved (received) from a rational source, or resource for reason. Reliance on rational sources—the resources for reason—is, other things equal, necessary to the function of reason. (469)

He further argues that rational sources are necessarily prima facie sources of truth, since "a condition on reasons, rationality, and reason is that they be guides to truth" (470). As such, in the absence of defeaters we have prima facie entitlement to beliefs produced by testimony. Allied to this, he argues that "the very content of an intelligible message presented as true" also marks an apriori *prima facie* connection to truth, since

> content is constitutively dependent, in the first instance, on patterned connections to a subject matter, connections that insure in normal

> circumstances a baseline of true thought presentations. So, presentations' having content must have an origin in getting things right. (471)

The latter consideration is meant to gain support from the former. "The prima facie rationality of the source intensifies a prima facie connection to truth already present in the prima facie existence of presented content" (471).

Huemer: *those who deny phenomenal conservatism are in a self-defeating position, since their view cannot be both true and justified.* Heumer (2007: 30) defines *phenomenal conservatism* as follows.

> If it seems to *S* that *p*, then, in the absence of defeaters, *S* thereby has at least some degree of justification for believing that *p*.

Huemer takes such seeming, which is identified with a mental state he terms *appearance*, to apply to the deliverances of various putative knowledge sources: sensory appearances, intellectual appearances, mnemonic appearances, and introspective appearances. He supports *phenomenal conservatism* by arguing that those who deny it lose the very resources to justifiably support their position. Since, barring some irrelevant cases, we always base our beliefs on such appearances (at some point in the explanatory/justificational process, on pain of infinite regress), and since, basing a belief *p* on something which is not a source of justification for belief *p* entails that *p* is unjustified, one who denies *phenomenal conservatism* can have no ultimate support for his denial.

Alston: *the theory of appearing captures crucial features of our standard way of forming beliefs, a way which is eminently reasonable to follow.* Regarding perceptual justification, Alston (1991:79) suggests the following theory of appearing.

> When a belief of mine that X is ϕ is based, at least in part, on an experience in which X appears to my experience as ϕ (or so it seems to me), that experience contributes to the justification of that belief.

Alston notes that normally such justification of perceptual beliefs is prima facie only, and is always open to undermining by defeaters. What is important for our purposes is that for Alston, the justification is often *immediate*, requiring nothing more than the experience itself. As such the theory of appearing stands amongst other theories which advocate a default justificatory status given to beliefs which arise as true.[84]

The forgoing has been a brief tour of contemporary attempts to elucidate the grounds for default positive epistemic status of belief or cognition. Like Nyāya, these attempts share the rejection of (wholesale) evidentialism or other approaches to justification/warrant, etc. which require prior grounding of belief. I should begin by noting that the Nyāya's account of prima facie entitlements are meant to apply to all of the *pramāṇas*, not merely perception or testimony, though it is clear that the phenomenal character of each *pramāṇa* differs. (Immediate "inferences for oneself," *svārtha*-*anumāna*, are best included among prima-facie entitlements, though "inferences for another," *parārtha*-*anumāna*, are already the product of deliberation.) In this, Naiyāyikas (as attested in various commentaries on NS 1.1.41) would

[84] A central feature of Alston's account is that he claims a non-circular defense of the reliability of sense perception is not required for it to convey prima-facie justification in this way. In fact, he persuasively shows that such a defense is impossible. Still, he does argue that it is "eminently reasonable to form beliefs in the ways we standardly do" since, we have no good reasons to substitute other kinds of doxastic practices for them, and a skeptical disavowal of assent is "not a serious possibility" (1991: 150). He later notes that "I only claim that we cannot be faulted on grounds of rationality for forming and evaluating beliefs in the ways we normally do (absence any overriding considerations), since there are no alternatives that commend themselves to rational reflection as superior" (1991: 168). He further argues that our standard practices like perception and deductive inference provide "significant self support" unlike crystal ball reading or other dubious practices (1991: 173-4).

agree with Huemer's position that the status in question ranges across various types of cognition.

As noted above, both Vātsyāyana and Gaṅgeśa suggest that in the absence of review or certification, *pramāṇas* provide cognition with positive epistemic status. Vātsyāyana indicates the status of such cognition by claiming that it is *nirṇaya*, a *definitive ascertainment* or *conclusive determination*. In the *Nyāya-sūtra* (1.1.41), *nirṇaya* has a technical meaning, referring to the desideratum of philosophical inquiry, a conclusive determination regarding an object at issue (*artha-avadhāraṇa*). Uddyotakara defines it as *artha-paricchedaḥ avadhāraṇam*, the determination which is a definitive ascertainment of an object (NV 1.1.41; ND 332). In the context of philosophical dispute, a judgment is deemed *nirṇaya* only after a final settlement is reached, having examined reasons for and against a position. But Vātsyāyana notes that in perception (for example), an immediate, unreviewed cognition born of the contact between sense faculty and object is *nirṇaya*. Uddyotakara is more explicit: "some claim that definitive ascertainment is simply inferential; that it is nothing more. We deny this. . . in the absence of [inference], definitive ascertainment may be produced as the result of the functioning of a *pramāṇa*" (NB 1.1.41; ND 333-4).

The above discussion is not meant to imply that *nirṇaya,* like *pramāṇa*, involves success grammar, that definitive ascertainment can't be false. As K. K. Chakrabarti (1984: 342) notes, "a *niścaya* [a synonym of *nirṇaya*] may be *yathārtha* or *ayatārtha* [correspondent or non-correspondent to reality]" and as such it is not primarily an externalist category of epistemic evaluation. I suggest that *nirṇaya* is best understood as epistemically responsible personal conviction. Instances of intense conviction which are epistemically profligate do not fit well with the notion of *nirṇaya* as described in the classical sources. Definitive ascertainment is, therefore, an internalist consideration that Nyāya has in respect to first-order cognitions. Further, regarding perception (for example), Vātsyāyana's notion of

nirṇaya is best understood as akin to the default justification accorded to a putatively veridical cognition. It is enough for justification, so long as no doubt-causing considerations arise.

In further support of this reading of the Nyāya view, we may note that Gaṅgeśa suggests that cognitions that are certain (*niścaya*) are provided by the deliverances of putative *pramāṇas.* Gaṅgeśa stresses the deep tie between cognitions which are certain and unhesitating action, *niśkampa-pravṛtti*, suggesting that the former is a condition on the latter.[85] That cognition is fundamentally conceived of as a guide to action is a characteristic feature of Nyāya. Gaṅgeśa repeatedly argues that certainty about an object, provided by an initial, putatively veridical cognition, is required for unhesitating action, but not certainty about the high-grade epistemic status (*prāmāṇya)* of the original cognition itself (see, e.g., Phillips/Ramanuja Tatacharya 2004: 130, 588).

I'd like to suggest some considerations which fill out Nyāya's account of entitlement. We will focus on Gaṅgeśa's theory. Its two primary features are as follows.

1. In the absence of defeaters, putatively veridical cognitions are instances of epistemically responsible personal conviction (*niścaya*). (As such, they are entitlements.)
2. Epistemically responsible personal conviction (*niścaya*) is a condition on unhesitating action.

[85] My impression is that if pressed Gaṅgeśa would concede exceptions which arise in consideration of pragmatic importance. Certain actions may be undertaken with great vigor and lack of hesitation which are epistemically undersupported. For example, though one is not certain that there is fire in his home, a fair amount of suspicion is enough for him to take his children outside. In this case, the importance of protecting one's children is the factor which issues in unhesitating action, not the certainty of the cognition of fire.

What makes putatively veridical cognitions entitlements? Are they entitlements because they provide for unhesitating action? If so, this supports a pragmatic reading of the rationale behind the default status in question: it is impossible to review most of our cognitions as they arise, and therefore, it is reasonable to trust cognitions which arise "as true" as we navigate our way through life, consciously justifying them only when contrary evidence necessitates review. If, conversely, unhesitating action is merely an indicator (*lakṣaṇa*) of certainty (*niścayatva*), then consideration two is irrelevant for our purposes; what is central is something internal to cognition.

I suggest that both interpretations of the connection harmonize well with Nyāya, and need not be understood as mutually exclusive. Indeed, Nyāya's defense of default trust has three elements (i) pragmatic, (ii) phenomenological, and (iii) theoretical. First, Nyāya holds that the very reason we are concerned with cognition is that we want to successfully navigate ourselves within the world. There is a deep tie between cognition, action, and the achievement of various projects in life. The *Nyāya-sūtra* (1.1.1) underscores the connection between cognition, action, and the satisfaction of life's aims by claiming that the project of attaining felicity (*niḥśreya*) requires correct apprehension (*tattva-jñāna*). Vātsyāyana argues that the development of virtue, the acquisition of wealth and pleasure, and the pursuit of enlightenment all depend on *pramāṇa*-produced cognition (NB 2.1.20).[86] Such projects are many, but in general they include developing an understanding of the world we inhabit, understanding the relationships amongst various entities within it, and, centrally, achieving happiness by putting ourselves into right relations with them. It must be stressed that these projects are things individuals *should* pursue. Deliverances of the *pramāṇas* (putative or validated) all we have to go on in this regard. Should we start by doubting them, we'd

---

[86] This is also discussed in the introductory remarks of Vātsyāyana, Uddyotakara and Vācaspati Miśra to the *Nyāya-sūtra*.

immediately lose the best resources we have to succeed in our aims, and as such, that we depend on cognitions which prima facie support those aims is rationally warranted. A view which undercuts our ability to achieve such aims—in particular a-priori skepticism—is ruled out. Vācaspati thus argues that doubt needs to be triggered by evidence, not ruled out in advance.

> For necessarily, if doubt is not rule-bound, there is an opportunity for the ghost of doubt to be released by transgressing the governance of *pramāṇas*. In that case, one would never act, since (i) unknown objects would somehow become a matter of doubt for everyone, (ii) doubt about unknown objects would contribute to inactivity on the part of thoughtful people, and (iii) in the end, death is seen even for those who are nourished by good food and drink [illustrating that one looking for doubt will be lead to question even the obvious connection between eating well and good health.] Therefore, those who preserve the conduct of reasonable people (*pramāṇika-loka-yātrā*) doubt things as they arise, not as they do not arise. (NVT 1.1.5; ND 139) [87]

This is clearly a pragmatic justification of trust in *pramāṇas*. An analogy for this approach may be found in paradigmatic cases of decision-making which require decisive action like a general's need to respond immediately to various reports about his enemy's position. Without the presumptive right to beliefs about putatively defeaterless information, he could

[87] I translate this passage and provide the Sanskrit in Appendix C. In the original passage, Vācaspati's specific claim is that we should not entertain doubt about a putative *vyāpti* in the absence of countervailing evidence, as long as a good-faith epistemic effort has been made to be aware of defeaters (in particular, *upādhis*). If we did treat such doubt, which centers on the bare logical potential for deviation, as legitimate (*arthaka*), we would become stultified in our lives as cognitive agents.

never make such decisions effectively. More commonly, it would be hard to navigate the walk home in an efficient and timely way if we didn't presume the correct functioning of our perceptual faculty.[88]

A second line of support to default trust focuses on the psychology of cognition. In short, the very terms *nirṇaya* and *niścaya* suggest that putatively *pramāṇa* born cognition do have something akin to Pryor's "phenomenal force", which makes it entirely reasonable to trust them in the absence of known defeaters or other doubt-triggers.

Third, there is a battery of arguments meant to establish that illusion and cognitive misfires of other sorts are parasitical on veridical experience. In other words, error presupposes some baseline veridicality and therefore, unless we conceive of our cognitive faculties as having some connection to truth, we lose the very basis by which we may understand and reflect upon error states. I call these *arguments from parasitism.* An allied line of argument, aptly described as *transcendental*, holds that some kind of dependence on *pramāṇas* is required for rational reflection and communication. Therefore, epistemic trust is presupposed, even by an apparently ardent skeptic.

Some illustrations of the argument from parasitism: Uddyotakara defends the diachronic identity of substances in response to a (likely) Buddhist interlocutor. The latter contends that since everything exists in a state of flux, all cognitions of enduring things are false (an accusation of massive cognitive error):

> False cognitions are imitations of correct cognitions. Therefore, you must provide some example of correct cognition. (NV 2.1.16; ND 436)[89]

---

[88] The reading I suggest here has affinities with Alston 1991: 168-173, Enoch and Schechter 2008, and Williams 2001.

[89] *mithyā-pratyayāś ca samyak-pratyaya-anusārena bhavanti iti kva āmī samyak-pratyayā bhavanti iti vaktavyam.*

False experience as of an enduring thing imitates or conforms (*anusāra*) to some true experience of an enduring thing. Therefore, the onus is upon the interlocutor to provide an example of correct cognition by which the error may be understood. More specifically, given Nyāya's empiricism (a position broadly shared by most classical Indian schools), the interlocutor must explain what kind of original, veridical experience could have generated the currently mis-ascribed concept of an enduring thing. In a similar context, against an opponent who considers motion to be unreal, he argues that

> All false cognitions imitate primary cognitions. You must state the original cognitions upon which the false ones are based. For we never find such a difference (between imitators and genuine things) without an original, as seen in the case of mistaken cognition of a man as a post. There being an existing post, one has the cognition "that is a post" regarding a person (in the distance). Or, there being a man, a post is mistaken for a man. (NV 2.1.33; ND 483)[90]

Mistaking a post for a person in the distance is a standard example of perceptual illusion in classical Indian discourse. Uddyotakara is arguing that such illusion, in which a concept is wrongly deployed in reference to an existing object, requires that the concept was generated in the first place. This, it is held, requires that at some point in the causal chain, a veridical cognition obtained by which the concept *post* was acquired.

---

[90] *sarvā etā mithyā-buddayaḥ pradhāna-anukārena bhavanti iti pradhānaṁ vaktavyam. na hi niṣpradhānaṁ bhāktaṁ dṛṣṭaṁ sthāṇu-puruṣavad iti yathā sthāṇau sati puruṣe sthānur iti buddhiḥ puruṣe vā sati sthāṇau puruṣa-buddhir iti.* A similar point is made (against a different opponent) at NV 4.1.33.

In his commentary on *Nyāya-sūtra* 2.1.36, Vātsyāyana confronts a mereological nihilist, who argues that perceptual experience as of composite wholes is an error. It is produced by ignorance of minute differences amongst micro-entities. As a forest is merely a collection of trees seen at a distance or an army is a collection of soldiers similarly seen, the objector argues that what are commonly taken to be composite wholes are nothing more than heaps. In his response, Vātsyāyana again appeals to the dependence of error upon the veridical:

> Vātsyāyana: If there is an experience as of a single thing owing to non-perception of the differences between atoms—which are in truth separate and various—then such is a case of erroneous cognition, like the cognition of a post as a man.
>
> Opponent: What of it?
>
> Vātsyāyana: As a false cognition of something as something else depends on the original, it establishes the original.
>
> Opponent: In the erroneous cognition of a post as a man, what is the original?
>
> Vātsyāyana: The cognition of a man, where there really is a man. Given the existence of that veridical cognition, one has the cognition "this is a man"

regarding a post, because of the apprehension of a similarity between the post and man. (NB 2.1.36; ND 503-4)[91]

Vātsyāyana further argues that since the opponent holds that the experience as of a whole is always fallacious, there is no original veridical experience to which the error in question can be compared and found wanting, and thus the opponent's argument fails.

In the above arguments, specific metaphysical theses were under consideration, and Nyāya, a realist school, defends the existence of enduring, composite wholes and motion by appeal to the parasitism of error upon veridical experience (among other considerations). The general principle, however, is that recognition of falsehood presupposes some fundamental true cognition. The theme which emerges is that in doubting the basis of the connection between cognition and reality, we lose the very distinction on which illusion or error makes sense. This principle is reiterated in the fourth book of the *Nyāya-sūtra* (4.2.31*ff*), in a more straightforwardly epistemological context. The opponent, apparently an early kind of Mādhyamika Buddhist, argues that appeal to *pramāṇas* does not settle the issue of things' real (and independent) existence:[92]

Opponent: This notion of knowledge sources (*pramāṇas*) and their objects is like that of dreams and their objects. [Vātsyāyana elucidates the opponent's

---

[91] *nānā-bhāve ca aṇunāṁ pṛthaktvasya agrahaṇād abhedena ekam iti grahaṇam atasmiṁs tad iti pratyayaḥ yathā sthāṇau puruṣa iti. tataḥ kiṁ? atasmiṁs tad iti pratyayasya pradhāna-apekṣitvāt pradhāna-siddhiḥ. sthāṇau puruṣa iti pratyayasya kiṁ pradhānam? yo 'sau puruṣe puruṣa-pratyayaḥ tasmin sati puruṣa-sāmānya-grahaṇāt sthānau puruṣo 'yam iti.*

[92] The Buddhist position has been alternatively framed as idealist, skeptical, and more generally anti-realist. In any case, the core thesis is that we are radically mistaken about our experience of apparently external real objects, which may be shared by any of the above groups of thinkers.

position:] As the objects within dreams are false but taken to be real, so too are the *pramāṇas* and their objects.[93]

The Nyāya response (captured in *sūtras* 4.2.33-37) has many facets. One important feature is the contention that dreams are understood only in distinction to waking consciousness, and as such, the Buddhist contender has illicitly helped himself to a case of accepted veridical experience in order to frame his thesis. Vātsyāyana: "It is because something's existence may be proven by its being experienced that its non-existence may be proven by non-experience. And if in both states (waking and dreaming), the objects of experience did not exist, then non-apprehension would have no power to prove anything" (NB 4.2.33; ND 1078).[94] We know that dream objects are false because upon waking we no longer perceive them. But non-perception's cognitive power depends on the cognitive power of perception. It is only because the latter is truly informative about the world that we can trust that our non-perception of something (in the appropriate conditions) is evidence that it does not exist. I know that there is no elephant in my office because if there were an elephant, perception would inform me of that fact. Analogously, if we did not take the enduring experience of objects in the waking state to be sufficient *prima facie* proof that they exist, the non-existence of dream objects would not suffice to indicate that they do not exist in the waking state. The cognitive distinction between dreams and waking awareness, upon which the objector's analogy rests, would be undermined.

This version of the argument is *epistemic*. Knowing error is parasitical upon knowing truth. Later, Vātsyāyana provides another form of the argument.

[93] *svapna-viṣaya-abhimānavat ayaṁ pramāṇa-prameya-abhimānaḥ . . .yathā svapne na viṣayāḥ santy atha ca abhimāno bhavati, eva na pramāṇāni prameyāṇi ca santy atha ca pramāṇa-prameya-abhimāno bhavati.*

[94] *upalambhāt sadbhāve saty anupalambhād abhāvaḥ siddhyati, ubhayathā tv abhāve na anupalambhasya samarthyam asti.*

> The cognition of something as what it is not depends upon an original. The cognition of a post—which is not a person—as a person depends upon an original. Indeed, there is no experience as of a person regarding something which is not a person if a person was never experienced in the past. (NB 4.2.34; ND 1085)[95]

Clearly, here the parasitism is *causal*. Illusions of this sort require the deployment of concepts like *man*. These concepts, it is held, require the prior experience of actual men and women. As noted above, this is tied to Nyāya's empiricism. Nyāya's theory of error is called a theory of misplacement (*anyathā-khyāti*). False cognition generally involves the mis-ascription of concepts actually grasped in the past upon something which is presently the intentional object of a cognitive state. In illusion and other kinds of error states, the memory impressions created by the prior experience are (usually, but not always) triggered by similarity with some feature of current experience. Hence, the wrong concept is deployed in reference to the object of current experience, leading (*upanaya*) the cognition astray, so to speak. The cognition is bifurcated, with part of it targeting the object "in view," while another part targets the object(s) under mis-ascribed concept. Thus every token error presupposes some direct cognitive contact with reality which engenders the concept currently misplaced.

Uddyotakara provides a third kind of parasitism argument, a parasitism of *content*. An anti-realist opponent contends that "there are no external objects, only consciousness

---

[95] *atasmiṁs tad iti ca vyavasāyaḥ pradhānāśrayaḥ. apuruṣe sthānau puruṣa iti vyavasāyaḥ sa pradhānāśrayaḥ na khalu puruṣe 'nupalabdhe puruṣa ity apuruṣe vyavasāyo bhavati.*

exists." Uddyotakara argues that the onus is upon the opponent to explain the content of the concepts deployed in states mistakenly thought to reveal an external world.

> He must be asked how awareness arises in *that* very form (the form of specific objects). If awareness takes the form of blood, then explain "blood." What is blood? Similarly, the form of water and river must be explained. The words "they see a river of puss," when examined, are found to be devoid of meaning, if there are no real objects like form, etc. (NV 4.2.34; ND 1085)[96][97]

Concepts, if divorced from engagement with external reality, lose their content. As I understand it, the import is that having an illusion or hallucination about blood requires that we be able to deploy the concept of blood. But if we have never had direct experience of blood, the concept, as we deploy it, would lack content. Derivatively, so would the word "blood" lose meaning.[98] We must, therefore start with some trust that our cognitive faculties indeed link us to the world.

The default trust in putative *pramāṇas* is thus supported by pragmatic, phenomenological, and theoretical considerations.

1.5 Inter-*pramāṇic* Support

[96] This admittedly horrifying example comes from Buddhist accounts of hell. Uddyotakara is assuming that the Buddhist takes such experiences as vivid illusions or hallucinations which a tormented being undergoes.

[97] *prṣṭavyo jāyate kathaṁ tatha iti. yadi rudhira-ākāram vijñānam rudhiraṁ tarhi vaktavyaṁ kiṁ rudhiram iti. evaṁ jala-ākāraṁ nādī-ākāraṁ ca vaktavyam. pūya-pūrṇāṁ paśyanti iti ca vākyasya padāni pratyekaṁ vicāryamāṇāni rūpādi-skāndha-abhāve nirviṣayāṇi bhavanti.*

[98] I should mention that although Nyāya was not party to a debate like contemporary internalism vs. externalism in philosophy of mind, clearly, it would have sympathy with content externalism. That is, it would agree with the position that the content of cognitive mental states is largely constituted by the external objects/facts to which they intend. This thesis clearly undergirds the *content-based* argument from parasitism.

We have examined various ways that individual cognitions are granted positive epistemic status. We have also discussed the basic criteria that a *pramāṇa* must meet—it must be an irreducible, factive source of knowledge. Now we will consider the question of meta-justification. What considerations are appealed to in defense of a *pramāṇa* type's status as a source of knowledge? Of course, *pramāṇas* are defined as factive and, as seen immediately above, Nyāya argues that there are good reasons to trust putatively veridical cognition. But in the reasoning by which certain kinds of natural processes are defended as *pramāṇas*, what considerations are central?

A starting point for this discussion is Vātsyāyana's commentary on *Nyāya-sūtra* 2.1.17-19. The immediate context of the passage is consideration of a characteristically Mādhyamika Buddhist contention that Nyāya faces a justificational regress. The objector inquires as to how the *pramāṇas* are to be established.

> 2.1.17: If the *pramāṇas* are established by another *pramāṇa*, there is the unwanted consequence that yet other *pramāṇa* is to be established.[99]

Vātsyāyana comments that the opponent is hinting at the problem of infinite regress (*anavasthā*). A third level of *pramāṇas* would have to support the second, etc.

> 2.1.18: Or, if no additional *pramāṇa* is required to establish them, let the objects of knowledge be established in the same way as the *pramāṇas*.[100]

[99] *pramāṇataḥ siddheḥ pramāṇānāṁ pramāṇāntarasiddhi prasaṅgaḥ.*
[100] *tadvinivṛtter vā pramāṇasiddhivat prameyasiddhiḥ*

The interlocutor frames the Nyāya account of *pramāṇas* as a final court of appeal in matters of knowledge. If such bulwarks are posited without support in order to escape regress, by parity of reasoning, why not posit the very things which they are meant to support in the first place? [101] Vātsyāyana comments: "If perception, etc. are established without requiring another *pramāṇa*, then the self and other objects of knowledge may likewise be established without requiring a *pramāṇa*, as there is no significant distinction between them. This effectively undermines all of the *pramāṇas*."[102] Clearly, the objector seeks to trap Nyāya in a dilemma: *pramāṇa* theory is either beset with an infinite regress or simply taken as given, the latter move undermining *pramāṇa* epistemology entirely. The *Nyāya-sūtra* responds,

> 2.1.19: No, the *pramāṇas* are established like the light of a lamp.[103]

At first glance, it may appear that the *sūtra* is offering something akin to foundationalist self-justification of certain fundamental acts or instances of knowledge. The metaphor would

---

[101] Nāgārjuna makes a similar argument:

> If such and such objects are established for you through the *pramāṇas*, tell me how those *pramāṇas* are established for you? If the *pramāṇas* are established through other *pramāṇas*, then there is an infinite series. Neither the beginning nor the middle nor the end can then be established. Now, if [you think that] those *pramāṇas* are established without *pramāṇas*, then your philosophic position is abandoned. There is discordance, and you should state the special reason for that. (*Vigrahavyāvartinī* 31-33; translation in Bhattacharya, Johnston and Kunst 1998: 115-16)
>
> As an aside, the opponent's position is also remarkably similar to that of Sextus Empiricus:
>
> If hypothesizing something achieves anything towards making it convincing, why not hypothesize the object of investigation itself rather than something else through which he is supposed to establish the object about which he is arguing? If it is absurd to hypothesize the object under investigation, it will also be absurd to hypothesize what is subordinate to it. (*Outlines*, I.173-4; translation in Barnes 2000: 42)

[102] *yadi pratyakṣādyupalabdhau pramāṇāntaraṁ nivartate ātmādyupalabdhāv api pramāṇāntaraṁ nivartsyaty aviśeṣāt. evaṁ ca sarvapramāṇavilopa.*
[103] *na pradīpaprakāśasiddhivat tatsiddheḥ.*

then run as follows: As light makes itself evident in the act of illuminating other things, properly-functioning *pramāṇas* are present and are known to be present when objects are clearly and distinctly manifest to consciousness. Therefore, the status of *pramāṇas* as reliable methods of knowing is established without appeal to any other support. This would stop the justificational regress by appeal to the deliverances of knowledge sources which are known to be veridical by means of their own functioning (or, similarly, by appeal to cognitions known to be accurate by means of their content or force alone). On this reading, the text would thus offer a fairly standard foundationalist response to the problem of justificational regress.[104]

This, however, is not the standard Nyāya view.[105] It is, in fact, much closer to the view of rival Mīmāṁsā philosophers (as discussed in Appendix A). Vātsyāyana interprets the *sūtra* differently than would the proponents of intrinsic veridicality.[106] He argues that commonly, something which is a means of knowing may be an object of knowledge in other circumstances. He interprets the lamplight metaphor as an illustration of this principle. As lamplight plays an instrumental role in perception, it helps to produce accurate cognitions, akin to a *pramāṇa*. But it is also knowable. It may be directly cognized visually. Moreover, it is cognized by means of inference, owing to its invariable concomitance with the perceptibility of objects at night (in the absence of the moon or other such luminaries): if something is visible under such conditions, there must be a lamp somewhere. Moreover, a

[104] Foundationalist epistemologies respond to the problem of justificational regress by appealing to regress-stopping instances of knowledge whose status is unimpeachable. Descartes famously touted "clear and distinct ideas" as such foundations, which included his awareness of himself as a thinking thing and his awareness of his idea of an infinite being. E. Sosa (2000: 135) compares foundationalism to a pyramid of knowledge-instances which ultimately rests on self-evident propositions.

[105] Siderits 1980 notes that some scholars have argued that Gautama did propound something like self-justification of *pramāṇas* and that Nyāya tradition abandoned such an approach.

[106] "Intrinsic veridicality" is a shorthand translation of *svataḥ-prāmāṇya*, the Mīmāṁsā notion that cognition justifies itself, and that later cognitions may only invalidate it while contributing nothing positive to its epistemic status.

lamplight's status as an illuminator is cognized by means of testimony. A child is told "Bring a lamp, as it will illumine things in the dark."

The lamplight metaphor illustrates the mutual support found amongst the *pramāṇas.* Nyāya thus rejects the challenger's assumption that things are either monolithically *pramāṇas* or *prameyas* (objects of knowledge) and must wholly serve either the function of revealing things or being revealed. It is not the case that *pramāṇas* are an unsupported support of all else. There is inter-*pramāṇic* mutual support as perception may certify inference, testimony may support perception, etc.[107]

Nyāya's deep commitment to inter-*pramāṇic* mutual confirmation is evident in some of the earliest passages in Vātsyāyana's commentary. In NB 1.1.3, He defends the convergence of *pramāṇas* (*pramāṇa-abhisaṁplava*), providing the example of knowledge of the indwelling self. From sacred tradition, we learn that there is an indwelling self, by inference, we establish it on the grounds that there must be a substratum for psychological properties, and in some rare cases, yogis themselves directly experience the self. It is noteworthy that here, as further discussed in Uddyotakara's commentary on NS 1.1.10, the further confirmation is not necessarily preceded by doubt, but nevertheless serves to strengthen the already-existing putatively *pramāṇa*-born cognition. Derivatively, it also provides confirmation of the *pramāṇas* which produced the cognition.

I think the Nyāya view of inter-*pramāṇic* confirmation may be understood by analogy with the notion of inter-subjectivity. While the immediate deliverances of knowledge sources are usually enough to constitute knowledge, intersubjective concordance regarding some fact or object often augments such knowledge, providing additional support. Moreover, when a particular belief or cognition is challenged, appeal to inter-subjective

[107] Vātsyāyana's method of applying this schema to perception is, as noted by Siderits (1980: 323), problematic. But other, better-chosen applications are available.

concordance is a common certificational strategy. As the fact or object in question is certified with strong credentials, the epistemic competence of individuals is then gauged by how well they ascertain the fact or object in question. Likewise, for a single person, inter-*pramāṇic* support provides compelling evidence for the existence of some fact or object, which then acts as a gauge for the functioning of the *pramāṇas*. This is the import of *sūtra* 2.1.16, *prameyā ca tulā-prāmāṇyavat.* "Just as a scale which is a source of knowledge is also an object of knowledge." Vātsyāyana (*NB* 2.1.16) notes that a bit of gold is an object of knowledge when weighed. But once its weight is securely ascertained, it may be used to determine whether other scales are properly calibrated. In the latter case, the scale itself is the object of knowledge, which the bit of gold "measures." The proper functioning of *pramāṇas* is thus verifiable through reflexive equilibrium with our most well-attested cognitions.[108]

A challenger may claim that "perception cannot justify perception without illicit circularity." But, as Vātsyāyana (NB 2.1.19) remarks, in common experience *pramāṇa* tokens are used to certify other *pramāṇa* tokens of the same type. Commonly, I ensure that I saw something properly by going back to look again. A perceptual token thus justifies another perceptual token. This is discussed in section 1.3 above, under the heading *confirmation by other pramāṇas*. Nyāya agrees that a given *pramāṇa* token is not self-certifying, but this concession does not amount to the claim that "perception cannot justify perception." I should add that indeed, if that single *pramāṇa* were all we had to go on, a

---

[108] Here, I follow Ganeri (2001b: 151-167), who reads a second-order coherentism in Nyāya. Patil (2009) disagrees, holding that Nyāya maintains a second-order internalist foundationalism. In short, I think that Patil, though largely right in his interpretation of Nyāya's epistemology, fails to recognize the importance of inter-*pramāṇic* support in second-order confirmation of cognition. Moreover, while it is true that Nyāya's attitude of default trust is, in a sense, foundationalist, such is not robust enough to support the characterization of Nyāya's attitude to justification as fundamentally an "internalist foundationalism." Finally, even in second-order, self conscious review, inferences employed are clearly conceived of as reliable methods of belief formation, and therefore, "internalist" seems inapt as well.

systematic cognitive flaw could engender radical error in token-token support of a same type. But Nyāya's notion of e.g., a perception-token supporting another perception-token already assumes the general checks and balances involved in inter-*pramāṇic* support. Udayana (introduction to NS) remarks that even perceptual confirmation of other perceptual tokens may retain a kind of intersubjective support inasmuch as such support may come from a separate sense-modality.

The above illustrates Nyāya appeals to considerations of coherence. Nyāya's coherentism[109] is deployed in *second-order* review or defense of individual *pramāṇa*-instances. Such coherence is already implied by the fact that certification requires the deployment of *pramāṇas* in support of other *pramāṇas*. Importantly, coherence does not play a regress-stopping role (or serve as an implicit concession that regress is otherwise inevitable). Such a role is taken up by the default positive epistemic status of putatively veridical cognitions. Unless legitimate challenge or doubt necessitates review, the chain of justification terminates in putatively veridical cognitions. Nyāya's coherentism, moreover, does not have a role in first-order conferral of positive epistemic status. Nyāya's coherentism is best understood as *adding* to our confidence in the *pramāṇas* (and not *providing* it *simpliciter*), though inter-*pramāṇic* support, often in response to doubt or challenge. Nyāya thus has both foundationalist and coherentist elements in its epistemological superstructure. A restricted foundationalism is found in the default trust given to putatively veridical cognition, while a restricted coherentism is found in inter-*pramāṇic* confirmation and support.

---

[109] Coherentism is a family of views that hold that what provides a belief with positive epistemic status is the degree to which it coheres with one's existing web of beliefs. It is often considered a rival to foundationalism, as it does not seek privileged foundations of knowledge upon which an individual's noetic structure may rest. Rather, all beliefs are, in principle, revisable. e. Sosa (2000) compares coherentism to a raft upon which one floats without anchor. The raft is one's web of beliefs. We will occasionally replace various pieces of wood which in sum constitute the raft, but to do so, we must rest our weight on other parts of the raft. Anything is revisable in principle, but not all beliefs at once.

Another skeptical challenge may be considered. Nyāya has defined *pramāṇas* according to successful function. A skeptic cannot challenge perception's reliability, for example, since, by definition, it always hits the mark. A cognition that missed would be judged (often in hindsight) pseudo-perceptual, not the genuine item. But a skeptic may ask how we know that perception (or testimony or inference) ever truly occurs. The standard Nyāya account is that success in action is the litmus test for veridicality and, hence, the operation of a *pramāṇa*. (As noted, in other cases, the operation of other *pramāṇas* may certify the occurrence of a *pramāṇa*-token in various ways.) Assuming that our faculties are not in a state of severe malfunction, this is a reasonable account. We would constantly bump into things if we often mistook pseudo-perception for perception. Since we don't, it seems that genuine perception usually guides us well. But in response to a more radical and broad skeptical challenge, like that of the skeptic of NS 4.2.31 (see above) it is clear that success in action is a question-begging criterion for success. It relies on the current proper-functioning of *pramāṇas* to establish previous instances of the proper-functioning of *pramāṇas*. If our faculties were deeply and systematically flawed, we may not feel ourselves bumping into things due to some further perceptual (tactile) error. Likewise, if all the *pramāṇas* themselves were deeply flawed, cross-*pramāṇic* support would not amount to much, and Nyāya's reflexive equilibrium would be nothing more than a network of mutually-supporting mistakes. Can Nyāya respond to the challenge to justify the *pramāṇas* themselves in a way that does not presuppose their functioning?

Some Naiyāyikas attempt to defend confirmatory inference from success in action by claiming that it is nearly infallible (e.g., slaking one's thirst puts to rest all doubts that one's eyes were being deceptive when one saw water). But these responses fail to do justice to the power of Buddhist or Cartesian challenges involving the potential indistinguishability of

veridical and non-veridical experience in situations of severe epistemic malfunction.[110] A more promising strategy is to reject the skeptic's formulation of the dialectical space. Indeed (and unsurprisingly) there is no non-circular defense of *pramāṇa* epistemology taken as a whole. The skeptic has framed the debate in such a way that leaves Nyāya no avenue for response, since any support would require appeal to some *pramāṇa.* Nyāya's most compelling rebuttal, therefore, consists of three features (and here, I am, for the most part, systematizing what is available in pages scattered throughout the literature): (i) framing the skeptical question as an adversarial challenge, which entails that both parties to the debate must meet requirements of various sorts, (ii) taking refuge in the conception that trust is the natural and indeed proper attitude toward putatively veridical cognitions in the absence of defeaters, and (iii) arguing to the effect that skeptical challenge is incoherent or self-refuting, since the skeptic's own position entails some kind of dependence on *pramāṇas*. I will briefly examine each feature.

(i) The skeptical challenge is nested within a framework of debate from the beginning. This is not a response peculiar to skeptical challenge. Rather, the adversarial nature of Indian philosophy leads Nyāya to respond to skeptics as they do to other challengers. Generally, as seen in the *Nyāya-sūtra* and its commentaries, and in independent works like Gaṅgeśa's *Tattvacintāmaṇi*, the skeptic enters as a challenger who enters to rebut Nyāya as it lays out its mature positions.[111] I will have more to say about what this entails while discussing the next two features.

(ii) The second feature appeals to Nyāya's account of default entitlements. As described above, this account, Nyāya holds, is evinced by common epistemic practices,

---

[110] See Matilal 1986: 168-79 for a discussion of some Nyāya attempts to establish an extremely high-grade of epistemic status for confirmatory knowledge by success in action. See K.K. Chakrabarti 1984: 350ff for a discussion of Vācaspati and Udayana's arguments that some kinds of inference have a status akin to intrinsic veridicality.
[111] For paradigmatic cases, see NS 2.1.8-11 and 2.1.17-18.

practices which are innocent until beset with legitimate doubt.[112] The upshot of this appeal is to call attention to the fact that the skeptic is assuming that his conception of justificatory practice—centered on a default lack of trust—is normative. And this is not only a serious theoretical matter, which no skeptic has a right to assume, but, from Nyāya's perspective, it is a flawed and stultifying epistemology, at variance with common and appropriate epistemic practices. As seen above (1.3-4), Nyāya further supports this notion by arguing that error is parasitical upon truth and that some nascent *pramāṇa* must be admitted by anyone.

(iii) The third feature accuses the skeptic of inconsistency, incoherence, or self-refutation. There are various examples of this in the literature. One is found Udayana's defense of inference.[113] Ancient Chārvāka materialists are said to argue (!) that perception is the only true *pramāṇa.* Chārvāka arguments against inference are broadly similar to Hume's, hinging on the problem of grounding inductive practice in an epistemologically satisfying way. They differ from Hume in that they focus on problems of infinite regress, not circularity: any attempt to defend the inductive concomitances (*vyāptis*) which support inference lead to further applications of inference, whose *vyāptis* must be defended, *ad infinitum*.[114]

While Udayana has the option to appeal to the regress-stopping power of non-doubted cognitions, he makes a more aggressive move. In short, he argues that the Cārvāka's trust in the status of inference is betrayed by his habits. Udayana jokes that upon traveling from home, the skeptic should lament the loss of his wife and children. By the evidence of perception alone, they are evidently absent from the inventory of reality. Of course Cārvākas did not deem their wife and children irrevocably gone simply by the evidence of non-

---

[112] See, for example, Vātsyāyana's commentaries on NS 2.1.11 and 2.1.19, where he repeatedly notes that common practice (*vyavahāra*) or that which is commonly seen (*yathā-darśana*) should (in the absence of salient counter considerations) be our guide in framing our conception of *pramāṇas*.
[113] The following passage takes place in NKM Chapter 3 (Dravid 1996: 234ff).
[114] Mādhavācarya 2002: 10-17.

perception. Given past experience, they expect their wives and children to be home when they return as they have in the past, according to fairly secure causal regularities—regularities which are the foundations of inferential practice, Udayana notes, and which also inform our perceptual judgments to a large measure. Udayana's point is that inference plays such a fundamental role in all of our cognitive states that we would radically have to dispose our most defensible beliefs should we reject it. By *tarka*, therefore, inference must be a knowledge source. He simultaneously accuses the Cārvāka of inconsistency (and even disingenuousness) owing to his arguing for something he clearly does not believe. As such, the Cārvāka's challenge lacks substance.

Udayana provides two kinds of transcendental argument. First, doubt about induction presupposes it. If one argues that despite inductive support, a probans (*hetu*) is always in danger of deviating from the supposed target fact (*sādhya*) at a future time, he is already committed to the principle of induction, and hence inference itself, embodied in the inductive confidence that there will be a future time (which will, in relevant ways, be similar to the current time). Second, in consonance with arguments outlined in section 1.4, Udayana argues that doubt requires a background of accepted facts. Siderits (1980: 331) paraphrases his point: "the institution of doubting makes no sense except against the background of some area of certainty." The skeptic must have some means of determining the standard of truth (a nascent *pramāṇa*), since the notion of falsity is parasitical on truth. The terminus for doubt, Udayana argues, is our practical behavior. Doubting as a mere theoretical exercise at complete variance with our conduct is mere contentiousness.

Gaṅgeśa's response focuses on the criteria for reasonable doubt:[115] He agrees that when there is reasonable doubt about a concomitance, further review is required, but

[115] Gaṅgeśa's opponent appears to be the great dialectician and Vedāntin Śrīharṣa whose argument may be summarized thus: Nyāya claims that by means of *tarka* it can reveal faulty pervasions (*vyāpti-*

contends that the bare logical possibility of error is not enough to trigger review. Following Udayana, he stresses that doubt which is consistently opposed by one's practical behavior is considered unreasonable. A skeptic may demand support for concomitances cited, and further concomitances cited in support of that, *ad infinitum*, but by his practical behavior, he commits himself to many commonly accepted concomitances without further defense. (This response again underscores that unhesitating action is a sign of confidence in the manifest connection between our cognitive faculties and the world.) The institution of language, which the skeptic unreflectively and trustingly employs, presupposes knowledge sources of various kinds.[116] Gaṅgeśa notes that, among other things, participating in conversation or debate presupposes the reliability of one's own memory and induction. The skeptic trusts the deliverances of memory, that the words one employs have been united with certain meanings. She further trusts inductive generalization, exemplified in the trust that utterances tied to certain meanings in the past will continue in the present discourse. The skeptic thus considers memory and induction reliable, else she would not speak. Gaṅgeśa cites Udayana: "Indeed that alone is doubted, which being doubted is not contradicted by one's own [habitual] behavior."[117]

Gaṅgeśa's argument convicts the skeptic of mere contentiousness evinced by his own pragmatic self-contradiction. He is worthy of being dismissed from the dialectic and his

---

ābhāsa), and thus defend our ability to deploy inference effectively. *Tarka* operates by revealing that consequences of certain positions (and endorsing a putative *vyāpti* is a position in this sense) violate norms of rationality, well-established beliefs, etc. A *vyāpti* which leads to such variance with established norms may be dismissed or at least deemed in need of serious philosophical support. Since *tarka* purports to reveal such a tension (*vyāghāta*), a question naturally arises whether *tarka* itself is well-formed. If Nyāya tries to defend an individual *tarka*, it must cite other concomitances in its support, paving the way for infinite regress. If it insists that the search ends with the original *tarka*, it has no way of distinguishing between a well-argued *tarka* and a faulty imitation *tarka.* See Phillips 1995: 152-6 and Ganeri 2001: 156-67.

[116] The origins of the appeal to language as presupposing *pramāṇas* can be traced at least as far as Uddyotakara's commentary on NS 4.1.40.

[117] See Phillips 1995: 162 for discussion. Something similar is expressed by Plantinga (1993a, 103): "we cannot so much as *raise the question* of the reliability of reason, or any other of our faculties, without taking the reliability of reason for granted."

challenge need not trigger doubt.[118] But more fundamentally, and irrespective of whether one is in a dialectical situation or not, a challenge's ability to call a putative *vyāpti* into question is determined by the comparative strength of both it and the putative *vyāpti's* coherence with our web of beliefs, cognitions, and values—a coherence which is often most tellingly evinced by one's own conduct.[119]

In summary, there are two primary ways that Nyāya defends the status of *pramāṇas*. First, by token-token support of putative deliverances of *pramāṇas* by other putative deliverances of *pramāṇas*, Nyāya appeals to coherence between the deliverances of the *pramāṇas.* Second, Nyāya takes the dialectical space to be such that we *start* from the legitimacy of *pramāṇas*. Of course, any particular *pramāṇa* instance may be challenged, and our conception of *pramāṇa* types may be improved upon, but we need not stand outside of *pramāṇas* to pass judgment on them. We start with trust. In this, it agrees with Alston's (1991: 149) contention "we cannot be faulted on grounds of rationality for forming and evaluating beliefs in the ways we normally do (absent any sufficient overriding considerations), since there are no alternatives that commend themselves to rational reflection as superior." And further, "we cannot look into any issue whatever without employing some way of forming and evaluating beliefs" (168-70). Since the *pramāṇas* are

---

[118] This, incidentally, is similar to Aristotle's response to skeptics regarding sense-perception in *Metaphysics* G (1010b3-13) (emphasis is mine):

> Again, it is fair to express surprise at our opponents for raising the question whether magnitudes are as great, and colors are of such a nature, as they appear to people at a distance, or as they appear to those close at hand, and whether they are such as they appear to the sick or to the healthy, and whether those things are heavy which appear so to the weak or those which appear so to the strong, and whether truth is what appears to the sleeping or the waking. *For obviously they do not think these to be open questions*; no one, at least, if when he is in Libya he fancies one night he is in Athens, straightaway starts for the Odeum. (Translation by W.D. Ross in Barnes, ed. 1994: 1595).

[119] As seen in some of the passages quoted above, Vātsyāyana makes a similar move, arguing that the skeptic's contention loses any probative force unless he admits that *pramāṇas* are legitimate (and therefore, that his argument is supported by them). But if he were to do so, he would immediately refute his skeptical position.

things which we trust in our pre-theoretical way of getting around in the world (see NB 2.1.20), the onus is upon a challenger. And such a challenge must not implicitly depend on the presumption of *pramāṇa*-born cognitions.

I think that this element of Nyāya again reinforces its affinity with the default and challenge conception of justification. Williams notes that

> The crucial feature of the Default and Challenge conception is that it saddles challengers, as well as claimants [to a particular belief], with justificational obligations. . . Entitlement to enter a challenge must itself be earned by finding specific reasons for questioning either the truth of the target belief or the claimant's entitlement to hold it, which means that naked challenges are out of order. . . All questioning, hence all positive justifying, takes place *in some definite justificational context,* constituted by a complex and often largely tacit array of current entitlements. In abstraction from such contexts, epistemic questions simply get no purchase. (2001: 152-3)

Skeptics tend to presuppose that challenges are always warranted and demand response. Nyāya contends that challenges must be properly motivated, and without proper motivation, they do not undermine the trust accorded to *pramāṇas.* [120]

1.6 Situating *Pramāṇa* Theory

[120] Wright (2008) argues that the skeptical scenario is not merely an adversarial challenge to be rebutted, but the consequence of a number of paradoxes which should concern anyone interested in the question of knowledge. He would disapprove of Nyāya's framing of the case at hand. I think, however, that given Nyāya's attempt to ground the trust in *pramāṇas* in considerations of pragmatic rationality and arguments from parasitism, they are not unreasonable in considering doubts in *pramāṇa* theory as challenges.

This final section of this chapter will attempt to place *pramāṇa* theory in the space of contemporary epistemology. I will consider two objections to my characterization of *pramāṇa* theory. Then, I will discuss three challenges to Nyāya's epistemology, gleaned from work in contemporary thought. Some of the discussion will be brief, noting issues already discussed above.

We can begin with a summary statement of my interpretation of Nyāya's epistemology, as developed in the preceding sections: *Pramāṇa* theory is best conceived of as a type of generic reliabilism insofar as it holds that the epistemic status of a cognition is derived by the excellence of the faculty which produces or supports it. Being *pramāṇa*-generated provides cognitions with high-grade positive epistemic status. *Pramāṇa* theory diverges from more standard reliabilisms by rejecting the notion of knowledge-producing faculties as *merely* reliable. The tie between a *pramāṇa*-born cognition and fact/object it targets is conceptual: *pramāṇas* invariably deliver the truth. Of course, an individual's awareness that her cognition is *pramāṇa*-generated is not infallible.

The externalism of this picture is tempered by an accessibility requirement. Putatively veridical cognitions are accorded a status of default entitlements, as Nyāya endorses an "innocent until legitimate doubt" attitude to justification. But when putatively veridical cognition is saddled with legitimate doubt, it must be reviewed and certified to maintain the positive epistemic status which it is granted on a default basis in the absence of defeaters. On this second level, considerations of coherence are deployed, as *pramāṇa* tokens of various types support each other (as do tokens of the same type). Although *pramāṇas* do not need to be consciously justified in order to do the job of producing veridical, justified

cognitions,[121] they are supported by (among other things) an argument to the effect that the burden of proof is on the challenger of the *pramāṇas* to rebut them in way that does not presuppose their veracity.

Challenge #1 *Pramāṇa theory is not a reliabilist theory, as it does not support pramāṇas* by *appeal to statistical successes in veridical belief output or dispositions for such success.*

This first objection is a challenge to my interpretation, as opposed to later objections that directly attack *pramāṇa* theory as I have elucidated it. A common feature of reliabilist notions of justification is the appeal to statistical successes in veridical belief output or to dispositions for such success.[122] As seen above, Nyāya starts from an idea of *pramāṇas* as invariably successful. Deviant but phenomenally similar processes are not instances of *pramāṇas'* failure, but of the absence of *pramāṇa* altogether. The observation contained in the objection is largely correct and indeed identifies an important distinction between the two.[123]

I have two responses in defense of my claim that Nyāya's is a type of generic reliabilism. First, Nyāya does employ evaluative procedures which are, for our purposes, similar to so called *track-record arguments* as seen in reliabilism. Vācaspati, for example, notes that the Veda may be gauged a legitimate source of testimonial knowledge about religious matters, since it provides good guidance regarding perceptible things (NVT 1.1.1,

---

[121] Uddyotakara underscores this point in his explanation of the lamplight metaphor above. He notes that like a lamp, *pramāṇas* need not be identified or cognized in order to illumine other things. In other words, they can produce veridical cognition though they are not identified and defended themselves.

[122] See, e.g. Goldman 2000: 345-6, Alston 2000: 358-9 and 2005: 112 for discussion of this feature of reliabilism.

[123] Stephen Phillips has voiced this criticism of the use of "reliabilism" as a label for *pramāṇa* theory in private conversation.

ND 8). In this case, there is no debate about the truth-conducive character of testimony proper, but rather an examination of whether the Veda is a genuine source of testimony. Second, and independently of this, Nyāya's stress on the factivity of *pramāṇas* does not bar it from the conception that cognition's epistemic status is derivative of the excellence of the process which forms and/or sustains it. I concede that the term "reliable" does not imply something as strong as factivity. Rather it implies that there are more successes than failures, to such a degree that something or someone is considered trustworthy. Nevertheless, the way in which a *pramāṇa* provides positive epistemic status to cognition closely mirrors the way in which a reliable process provides positive epistemic status to a belief. If a process which is accurate 70% of the time is reliable, so too is one which is accurate 100% of the time. Though the *pramāṇas'* level of success is much higher, being inerrant, the difference in how they generate justified belief is one of degree, not kind.

Moreover, I suggest that Nyāya would recognize that what we may call our belief-forming tendency (my term, not Nyāya's), by which I mean our disposition to form beliefs via either *pramāṇas* or pseudo-*pramāṇas*, is, on the whole, reliable. Though we sometimes make mistakes, we are fairly good at discriminating between *pramāṇas* and pseudo-*pramāṇas*, and trusting our instincts serves us well.[124]

Challenge 2: The interpretation of pramāṇas as inerrant is mistaken. It is better to understand Nyāya as holding that pramāṇas are reliable, since inerrant pramāṇas are clearly impossible.

---

[124] I think that one major component of the Nyāya-Buddhist debates is just this. Nyāya maintains a Reidsean confidence in our natural faculties, where Buddhists tend to be radically distrustful of ordinary cognitive states. Where Nyāya epistemology, though normative, prefers to map the accurate pathways provided by nature, Buddhists epistemology has an extremely "corrective" bent, and considers our default tendencies misleading.

I have discussed this objection and responded at length in section 1.2. In summary, my position is that as a form of epistemological disjunctivism, Nyāya's conception of inerrant or factive *pramāṇas* is not strange, but entirely reasonable. I have also argued that such an interpretation is clearly entailed by a number of statements by Nyāya authorities. Here, I'd like to explain more fully my understanding of Nyāya's disjunctivism.

In the contemporary context, epistemological disjunctivism may be construed as a rejection of a fairly common approach to cognition and knowledge, which takes its departure from the argument from illusion and its cognates.[125] Proponents of the contested approach (sometimes called the *Cartesian* or *highest common factor* view) notice that we are fallible judges of error and knowledge. In principle, the two are subjectively indistinguishable. Since we could be wrong about almost any putatively veridical cognition, they hold that we should begin our epistemological reflection by taking alethically-neutral belief states (or "appearance states") as fundamental. We start from what is taken to be directly present to consciousness, identified as such belief states (e.g., "an appearance as of F"), and then try to work our way "outward" to knowledge of the world. Appearance states are neutral to truth and falsity, and specific appearance terms like "perception" may be used such that they don't entail truth. Illusion and hallucination are, in an important sense, similar sorts of states as veridical perception.

The disjunctive conception rejects such a construal, and most centrally it refuses to prioritize truth-neutral appearance states in the face of the argument from illusion. McDowell's remarks are paradigmatic:

> But suppose we say—not at all unnaturally—that an appearance that such-and-such is the case can be *either* a mere appearance *or* the fact that such-and-such

[125] See Dancy 2009 [1995].

> is the case making itself perceptually manifest to someone. As before, the object of experience in the deceptive cases is a mere appearance. But we are not to accept that in the non-deceptive cases too the object of experience is a mere appearance, and hence something that falls short of the fact itself. (2009 [1982]: 80)

The disjunctivist rejects the Cartesian approach by arguing that in veridical experience, we have a kind of direct access to reality.[126] Non-veridical cognitive states are held to be of a different fundamental kind as veridical states, and there is no need for a single kind of appearance state with both true and false variants (hence, the name "disjunctivism"). In Nyāya, this distinction is found in the clear differentiation between *pramāṇa* and *pramāṇa-ābhāsa* (pseudo-*pramāṇa*). To put it graphically, disjunctivism seeks to break out of the realm of subjective appearances which is presupposed by the Cartesian picture. Though disjunctivists recognize the potential indiscriminability between veridical and non-veridical cognitive states, they refuse to be "bumped up" to a highest common factor view of cognitive states. The disjunctivist thus begins by affirming the power of our basic cognitive faculties to directly grasp the world.

A number of arguments given by pioneering disjunctivists echo Nyāya's argument from parasitism. The first two passages below match up with what I have called the *content* version of the argument. They argue that being able to navigate conceptual relations at all presupposes a baseline of veridical cognitive contact with the world. The third presents a more general parasitism.

---

[126] Disjunctivism is often coupled with direct realist accounts of perception. Direct realism is the view that in perception, external objects are directly apprehended. Unlike representational accounts of perception, direct realism rejects perceptual intermediaries like sense data. Nyāya too is an ardent defender of direct realism, as amply illustrated in Matilal 1986.

> If we refuse to make sense of the idea of direct openness to the manifest world, we undermine the idea of being in the space of reasons at all, and hence the idea of being in a position to have things appear to one in a certain way. (McDowell 2000 [1995]: 418)

> If moves in the space of reasons are not allowed to start from facts, riskily accepted as such on the basis of such direct modes of cognitive contact with them as perception and memory, then it becomes unintelligible how our picture can be a picture of a space whose positions are connected by relations that reason can exploit, such as that one of them is a reliable ground for moving by inference to another. (McDowell 2000 [1995]: 418)

> In any case of perfect illusion or hallucination, we can explain its character by reference to the case of veridical perception, and we cannot give an explanation of what it is like except by implicit reference to the kind of veridical perception from which it is indistinguishable. (Martin 2009 [1997]: 98)

McDowell further offers a transcendental argument that if our experience is to have "objective purport", a sense of being about external objects, we must conceive of it in the best cases at least, as having "objective facts directly available to perception" (2008: 380).

The above excursion into contemporary disjunctivism is meant to illustrate that Nyāya's view is not simply a strange artifact from an ancient school of thought, or that Nyāya's fairly straightforward statements to the effect that *pramāṇas* are inerrant must be

explained away or reconsidered. Nyāya's is an important anticipation of a modern revolution of sorts, one which refuses to take the Cartesian attitude as a default. Nyāya does not hold the patently false view that every mental state with apparently *pramāṇic* character is veridical. Rather, it holds that *pramāṇa*-produced cognition is partially constituted by a truth-hitting relation to external objects/facts. Jayanta, we may remember, argues that the qualification "produced by the object" ranges over all *pramāṇas*. Therefore, in the absence of the right kind of relation to the world, cognition is of a non-*pramāṇic* kind, regardless of its phenomenal character.

Challenge 2 is motivated by the assumption that the Cartesian attitude of alethic neutrality is mandatory, an assumption which disjunctivists (including Nyāya) reject.

Challenge 3: Pramāṇa epistemology is beset by faults common to other reliabilisms, including problems arising from reliable belief-producing mechanisms which nevertheless generate unjustified or unwarranted belief.

I will look at two ways this objection may be developed. (i) Philosophers like Bonjour (1985: 41-5) and Lehrer (2000: 393) have provided relevant counterexamples to externalist and reliabilist theories of knowledge. Bonjour has imagined an individual with reliable psychic powers who lacks knowledge that he has such powers or that they are reliable sources of knowledge. Trust in the beliefs which the faculty produces therefore seems epistemically irresponsible, hence unjustified, even if the beliefs are true. The moral is that the mere fact that an external relation between one's belief and reality obtains is not to make the beliefs justified, when the relation is entirely outside of the scope of his awareness. Such belief runs against subjective rationality, which is necessary for justification.

Lehrer has provided the allied example of *Mr. Truetemp*, a man who unknowingly possesses a thermometer implanted in his brain. This device, the *tempucomp,* engenders in him accurate thoughts of the weather, though Truetemp is unaware of both the source of his temperature beliefs and its reliability. As such, Lehrer contends, Truetemp lacks knowledge despite his beliefs' being produced by a reliable belief-forming mechanism. Knowledge requires some awareness why one's beliefs are true. The moral is that externalist accounts offer criteria for the possession of *information*, not knowledge.

I suggest that Nyāya has the resources to respond to such challenges. A response could take the following form: To the degree that justification is taken to require the rich internal reflection which BonJour and Lehrer champion, it is not required for knowledge. It may provide for something *more* than knowledge, like high-grade epistemic excellence. But to respect the fairly strong intuition that children and some animals can have knowledge, we must have an account of knowledge without a heavy internalist constraint. Room must be made for something like Sosa's (2000: 282) *animal knowledge*, born of nothing more than epistemic faculties which are working properly. Putatively veridical cognitions which have not been the subject of reflection or certification are quite similar to Sosa's animal knowledge and similarly defy the requirement of internalist justification. In support of this consideration, Nyāya may note, along with Alston (2005: 54), that a consequence of BonJour's argument would be "to brand a large proportion of human perceptual beliefs unjustified as well." By *modus tollens* (or *tarka*), his stringent requirement should be jettisoned.

Nyāya can, however, recognize the motivation behind the counterexamples and accommodate it within its system. Lehrer and BonJour's deep concern is that epistemological theory recognizes the importance of subjective rationality. Nyāya can argue that its does this through its accessibility requirement as discussed above, a requirement

which includes the need to reflect on the trust one places in *pramāṇas* if such reflection is warranted by circumstance or reasonable adversarial challenge. Consider the following statement by Vātsyāyana (NB 2.1.20):

> The activities of practical life are based on the knowledge of the objects rightly known and the causes thereof. The activities in practical life relating to the attainment of virtue, wealth, pleasure, and enlightenment—as well as the avoidance of their opposites—are successfully carried on by one who acquires the knowledge of the objects rightly known and the causes thereof in the following form: "I apprehend by perception," "I apprehend by inference," "I apprehend by comparison," and "I apprehend by verbal testimony;" again, "my knowledge is perceptual". . . . "My knowledge is verbal." (NB 2.1.20; modified translation of Gangopadhyaya 1982: 89)

Nyāya satisfies the concern for subjective rationality in the "review" portion of epistemological practice, not by making such reflection a prerequisite to trust the spontaneous deliverances of knowledge sources. It must again be underscored that such access is not required for animals, children, or the severely mentally disabled to have knowledge. Does this indicate that for rational agents, more stringent requirements must be met for the attainment of knowledge? Partially. As noted (especially in section 1.4 above), the unreflective trust placed in putatively veridical cognitions usually serves us adequately. But the presence of legitimate doubt or challenge does undermine entitlements until they have been certified. This accessibility requirement allows for an epistemic excellence unavailable to barely- or non-rational beings. Fully rational beings can reflect on and improve their epistemic practices and revise their beliefs after doubt and review.

(ii) Taking a slightly different track than Bonjour and Lehrer, Plantinga (1993) repeatedly invokes instances of cognitive malfunction which, nevertheless produce belief reliably. A common example involves a brain tumor which gives rise to various cognitive processes that engender a number of false beliefs (1993: 199). Still, one process associated with the tumor's influence reliably produces the belief that the subject does in fact have a brain tumor. The standard intuition in this case is that the reliability of the process, itself being quirky and somewhat accidental, does not produce warranted belief.[127] One may ask whether analogously a reliable *pramāṇa*-like faculty may be construed which produces unwarranted belief.[128]

The challenge for *pramāṇa* theorists is to build something like a non-accidentiality clause into accounts of *pramāṇa*, or at least some kind of requirement which excises problem cases like Plantinga's. As Sosa (1993) has noted, arguments like Plantinga's have led reliabilist-minded thinkers to embrace ideas associated with virtue theory. For example, that the positive epistemic status of a belief requires that the faculties which produce them are generally truth conducive in a way that is sensitive to the environment in which they are being employed.

I think that, again, Nyāya has the resources to respond to this problem. First of all, by its appeal to something akin to cognitive natural kinds, Nyāya can argue that accidental truth hitting mechanisms which cannot be reduced to standard-*pramāṇa* types are not to be given the status of *pramāṇa*. *Pramāṇa* types are identified by reflection on successful function in familiar sorts of cognitive environments. And arguably, as new candidates for *pramāṇa* status are proposed, they will be considered in the light of such types. As will be seen in the discussion of yogic perception, when confronted with apparently new kinds of

[127] Plantinga's solution is to build into his account the notion of a design plan to which a cognitive process must adhere (among other things) in order to produce warranted belief.
[128] Cory Juhl voiced this concern regarding *pramāṇa* theory in conversation.

pramāṇas, Nyāya considers how to include them, in a principled way, within standard *pramāṇa* types, should they meet certain criteria. If not, and if they do not form the basis of a new kind, then despite their reliability they may not be given the status of *pramāṇa* in this most important sense. I think that concern about reliability *within an environment* is also latent in *pramāṇa* theory. If cognitive faculties like ours did not reliably produce true belief on some alien world, they would not be *pramāṇas* there. The success requirement of *pramāṇa* may make faculties which are *pramāṇa* in one environment non-*pramāṇa* in another environment.

In regard to cases of cognitive factivity through quirkiness or serendipitous malfunction, we see in later Nyāya theorizing (though it goes back at least as far as Jayanta), a stress on epistemic *guṇas* ("excellences," or even "virtues") and *doṣas* (faults), where the two are described as factors within a cognitive process which give rise to veridical and non-veridical cognition respectively. In a standard example (as will be seen in Chapter 5), one excellence which engenders veridical testimonial cognition is the benevolent attitude of a testifier, with the opposing fault of a hostile desire to deceive. Similarly, good lighting may be thought of as one excellence which assists the production of veridical perceptual cognition, while a defective sense-organ is a fault. And so on. What is noteworthy is the category of *doṣa-ja pramāṇa*, where a token process delivers veridical belief, but accidentally, as it involves faults that would ordinarily undermine the cognitive process.[129] While such a process is sometimes given the name "*pramāṇa*", this is a loose usage, a mere homage to the fact that it happened to produce a veridical cognition, as it does not fit into the standard natural kinds, and is, from the standpoint of epistemic practice, unhelpful in sustained patterns of belief-formation. In fact, I think that the conceptual distinctions

---

[129] See Dasti and Phillips *unpublished.*

available to Nyāya allow it to consider such a process a non-*pramāṇa*, when speaking of *pramāṇa* in the primary sense of typable cognitive faculties.

Finally, a mature epistemic agent's employment of *pramāṇas* is understood to take place as informed by some degree of practice and sensitivity to the features which nullify apparently veridical cognition, trigger review and confirmation, and lead to epistemic success and failure (c.f., NB 2.1.20). All of this is tacitly required as per Nyāya's account of doubt, review, and inter-*pramāṇic* support. Like Sosa's (1993: 63) *epistemic perspective*, it allows for some virtue-theoretic conceptions to augment *pramāṇa* theory.

Challenge 4: The Generality Problem

Because of its importance, I am noting this objection to reliabilism amongst the challenges in this section. I will note that this question is treated, successfully, I think, in section 1.2 above, by appeal to natural kinds and Nyāya's factivity requirement.

Challenge 5: The Specter of Idealism: Nyāya purports to be a robust realism, but its epistemological methodology borders on idealism.

This concern is mentioned in passing by Ganeri (2007): "Philosophical projects that begin by describing privileged sources of knowledge and then declaring that what there is what can be known by way of them have a familiar habit of collapsing into idealism."[130] If *pramāṇas* are defined a priori, and only those things which conform to them are considered knowledge, it seems that Nyāya is not allowing the world to dictate the nature of reality, so to speak. Perrett (1999: 403) frames the issue as follows: "what idealism affirms and realism denies is

[130] Ganeri notes that J. N. Mohanty is reported to have mentioned such concerns.

that the contents of the universe are limited by our capacity for thought." Since Nyāya considers itself a stalwart realist tradition, this criticism cuts particularly deep. This is at least a prima facie problem for Nyāya.

A relevant early statement is provided by Vātsyāyana.

> One cannot rationally establish the existence of an object which is beyond the range of perception and the other *pramāṇas*. If an object should exist which is beyond the purview of perception and the rest, then it could not be grasped by them. And upon apprehension of it, some other *pramāṇa* would have to be postulated. But no one is able to point out such an object. Therefore, the existence and non-existence of all things is understood as grasped by perception and the rest.[131]

At first glance, this claim seems to have idealistic overtones, but I think that it need not be understood as such. A non-idealistic attitude to the primacy of *pramāṇas* is consistent with Nyāya's particularism. Theorizing about *pramāṇas* begins with reflection upon common experience. The data of experience tells us that certain cognitive processes guide us to truth and others do not (again, note the final paragraph of NB 2.1.20). Such processes are then conceived according to successful function and given the status of *pramāṇa.* That there is a specific number of *pramāṇas* which play certain cognitive roles is supposed to be the result of mature theory, born of long reflection, experience and philosophical development. In that light, Vātsyāyana's above claim may be read as a challenge: if you want to claim that something exists besides what is given by the *pramāṇas* as we conceive of them, then we

---

[131] *pratyakṣādīnāṁ ca aviṣayasya anupapatteḥ yadi syāt kiṁcid artha-jātaṁ pratyakṣādīnām aviṣayaḥ yatpratyakṣādibhir śakyaṁ grahītum, tasya grahaṇāya pramāṇāntaraṁ upādīyeta, tat tu na śakyam kenacid upapādayitum iti. pratyakṣādīnāṁ yathā-darśanam eva idaṁ sac ca asac ca sarvaṁ viṣaya iti.*

challenge you to do so without reliance upon those we have specified. He expresses his doubt that someone will be able to do so. Still, his rejection of the possibility of doing so may be read as an empirical finding, not a conceptual truth. That this is so is indicated by the many instances of Nyāya's response to skeptics which takes the following form: if you think you can truly undermine the status of the *pramāṇas* as we conceive of them, you are relying on yet another *pramāṇa* in order to do so, a *pramāṇa* which you have not yet specified (see, e.g., NV 2.1.11).

Aside from this, we do see that Nyāya tends to incorporate apparently new knowledge sources into the *pramāṇas* by means of principled absorption. This process will be seen in Chapters 2 and 3, where the notion of perception, for example, is stretched to include yogic experience among other forms of non-ordinary perception. Proof by non-observation is similarly subsumed into perception or inference, depending on the context. In short, Nyāya evinces sensitivity to new discoveries and in principle, at least, an openness to new kinds of *pramāṇas*. In practice, it tends to expand its conception of *pramāṇas* to fit new data. This should reduce the fear of idealism.

Chapter Two: The Standard Knowledge Sources and Relevant Non-*pramāṇas*

Pramāṇa theorists of every stripe are fundamentally concerned with the individuation and analysis of each knowledge source. For Nyāya, the recognized *pramāṇas* are perception (*pratyakṣa*), inference (*anumāna*), analogy (*upamāna*), and testimony (*śabda*) (NS 1.1.3).[1] As seen in sections 1.2 and 1.6, Nyāya identifies *pramāṇas* as factive knowledge sources, and distinguishes between them according to the mechanisms by which they generate cognition. For example, perception occurs when a natural psycho-physical process centrally involving senses-object connection operates as it should; that is, successfully. This chapter will provide detailed analyses of each of the candidate *pramāṇas.* The analyses of individual *pramāṇas* are extensively refined and adjusted by various Naiyāyikas, but our point of departure will be the foundational *sūtra* texts. My intention is not to catalogue the varieties of interpretation or analysis given by Naiyāyikas, but to provide a basic sense of each *pramāṇa* and of the considerations involved in defining them.

---

[1] For comparison, the following is a list of major schools of Indian philosophy and the *pramāṇas* they accept (barring a few exceptions or reformers within each school). As will be discussed, most conflicts are not over the legitimacy of a candidate *pramāṇa*, but whether it may be subsumed within a more fundamental *pramāṇa* type. All of the *pramāṇas* mentioned here will be discussed in this chapter.

Chārvāka	Perception
(Yogācāra) Buddhism	Perception, Inference
Vaiśeṣika	Perception, Inference
Sāṁkhya	Perception, Inference, Testimony
Yoga	Perception, Inference, Testimony
Viśiṣṭādvaita Vedānta	Perception, Inference, Testimony
Jaina	Perception, Inference, Testimony
Nyāya	Perception, Inference, Testimony, Analogy
Mīmāṁsā (Prābhākara)	Perception, Inference, Testimony, Analogy, Postulation
Mīmāṁsā (Bhāṭṭa)	Perception, Inference, Testimony, Analogy, Postulation, Non-perception
Advaita Vedānta	Perception, Inference, Testimony, Analogy, Postulation, Non-perception

2.1 *Pratyakṣa* (perception)

NS 1.1.4 defines perceptual cognition as follows.

> A perceptual cognition arises by means of the connection of sense faculty and object, is not dependent on words, is non-deviating, and is determinate.[2]

There are four conditions which must be met for cognition to be perceptual. The first, that cognition arises from the connection between sense faculty and object, evinces Nyāya's direct realism.[3] It is such connection, the central feature of the causal chain which terminates in perceptual cognition, which fixes the intentionality of a token percept. Uddyotakara enumerates various kinds of connection (*sannikarṣa*) to account for perception of objects, of properties which inhere in objects, of universals which are nested in properties, etc.[4] In all cases, the perceptual cognition is born of connection between a sense faculty and an occurent fact or object.[5]

The second condition, that the cognition produced is not dependent on words, has a long interpretive history. Generally, Nyāya holds that ordinary perception involves concept deployment. Therefore, this restriction does not endorse a view held by the Buddhist

---

[2] *indriyārtha-sannikarṣa-utpannaṁ jñānam avyapadeśyam avyabhicāri vyavasāyātmakam pratyakṣam.*

[3] See Matilal 1986.

[4] The six kinds of connection are (i) conjunction (*samyoga*), the connection between a sense faculty and an object; (ii) inherence in what is conjoined (*saṁyukta-samavāya*), the connection between a sense faculty and a property-trope which inheres in an object; (iii) inherence in what inheres in what is conjoined (*saṁyukta-samaveta-samavāya*), the connection between a sense faculty and the universal which is instantiated in a property-trope; (iv) inherence (*samavāya*), the kind of connection which makes auditory perception possible; (v) inherence in what inheres (*samaveta-samavāya*), the connection between the auditory faculty and a property-trope which inhere in a sound; (vi) qualifier-qualified relation (*viśeṣya-viśeṣaṇa-bhāva*), the connection which allows for the perception of inherence and absence in objects.

[5] Strictly speaking, there are a few exceptions to this claim. Naiyāyikas claim that God's perceptions, for example, are not produced by sense faculties, since God has no body. This will be discussed further in chapter three.

Dignāga and his followers, that genuine perception is non-conceptual (*kalpanā-apodha*).[6] Still, the meaning of *avyapadeśya* is disputed amongst Naiyāyikas. On one reading, this qualification serves the purpose of distinguishing between perceptually and testimonially generated cognitions. The latter also require information provided by the senses but further require the deployment of semantic and syntactic knowledge. An allied reading suggests that while involving the proper application of concepts, perception of an object is causally prior to speech acts involving it, and therefore does not require semantic understanding.[7] Likely, this condition is a response views which anticipated the work Bhartṛhari, who argues that all perception depends on language.[8]

The third, "non-deviating" condition blocks false cognitions, like the misperception that an oyster shell is a piece of silver, from the ranks of *pramāṇa*-born. This belies the inerrancy of *pramāṇas.* As discussed in section 1.1, Nyāya espouses something akin to a correspondence theory of truth. Vātsyāyana defines truth (*tattva*) as the correspondence between something taken to be real and its reality and, conversely, something taken to be unreal and its unreality (*NB* 1.1.1; ND 24-5).[9] Gaṅgeśa defines a veridical awareness-episode as *tadvati tatprakārakaḥ anubhavaḥ*, "an awareness-episode with predication content *x* which hits something which is qualified by *x"* (*Tattvacintāmaṇi*, Pramā-lakṣaṇa-vāda;

---

[6] Hatori 1968: 25, 82n. 1.25.
[7] Uddyotakara on Ns 1.1.4: "perception is that cognition which follows and varies with the variations in the object and appears in a person who has not made use of, and does not yet know the (denotative) relation that the object may bear to any word or words." Translation by Jhā (1999: 134).
[8] See Vātsyāyana's commentary on *avyapadeśya* (*NB* 1.1.4; ND 109-111.) Mondal 1982: 359-60 provides a succinct account of the dialectic involved. Also see Matilal 1986: 29-30; 387-398. Matilal (1986: 387) summarizes Bartṛhari's view: "having a concept and using a word are merely the two sides of a coin. They arise from the same capacity of the mind." He cites Bhartṛhari: "There is no awareness in this world without its being intertwined with the word."
[9] *Kim punar tattvam*? *Sataś ca sadbhāvo 'sataś ca asadbhāvaḥ. Sat saditi gṛhyamāṇam yathābhūtam aviparītam tattvam bhavati. Asac ca asaditi yathābhūtam aviparītam tattvam bhavati.* Clearly, in the context of the passage, Vātsyāyana is speaking of the truth of cognitions/beliefs and not merely of propositions, statements or similar entities.

Phillips/Ramanuja Tatacharya 2004: 236). Pseudo-perceptual cognitions which deviate grasp something as qualified by a property it does not have.[10]

The fourth, "determinate" condition blocks cognitions which are merely doubtful from the ranks of the *pramāṇa*-born. Dubious cognitions, like that of a distant person at dusk, do not convey misleadingly false information, but being unclear, they do not properly apprehend the object in question. It could be a person or a post. As such, one neither correctly grasps its character nor falsely takes it to represent accurately a certain object. Later Naiyāyikas, most notably Vācaspati Miśra, read the qualifiers "non dependent on words" and "determinate" disjunctively, in order to say that perception may be non-propositional or propositional. However anachronistic this may be as an interpretation of the *Nyāya-sūtra*, this division is accepted by later Nyāya.[11]

Perception is commonly called the *jyeṣṭa pramāṇa* (the "eldest" knowledge source) since other *pramāṇas* depend on perceptual input.[12] To adapt Goldman's (2000: 346-7) terms, Nyāya considers *pratyakṣa* the only "belief-independent" method of knowing, as it is the only process which generates cognitions without being triggered by the input of other cognitions.[13] Indeed, Gaṅgeśa suggests the following definition of a perceptual cognition: "a cognition that does not have another cognition as its proximate instrumental cause." (Adaptation of the translation in Phillips/Ramanuja Tatacharya 2004: 335). Inference, analogy, and testimony, on the other hand, depend on immediately prior cognitions to trigger

---

[10] See NS 4.2.37 and allied commentaries for accounts of the structure of cognitions which deviate.

[11] For discussion and debate regarding the nature of non-propositional perception in Nyāya, see A. Chakrabarti 2000 and Phillips 2001.

[12] Vātsyāyana and Uddyotakara (NB/NV 1.1.3) add another reason: perception tends to produce a higher level of conviction than other knowledge sources; the conviction it produces has a distinctive kind of authority, owing, I would suggest, to its phenomenal immediacy.

[13] Propositional perception (*savikalpika pratyakṣa*) may be said to depend on prior experience, as it requires the deployment of concepts acquired through previous experience. Still, it differs from inference, analogy, and testimony which depend on immediately previous cognitions as their "trigger" causes (*karaṇa*).

their functioning. Vātsyāyana (NB 2.1.32) notes another fundamental difference (*lakṣana-bheda*) between perception and inference. Unlike perception, "inference is never due to the connection of the sense faculty with the object to be inferred." Nyāya also admits of extraordinary types of perception, including certain kinds of religious experience, as will be discussed in the third chapter.

The normative status accorded to perceptual cognitions is primarily a matter of causation and *objecthood* (intentionality). If a cognition is caused by the appropriate causal chain, starting with the contact of a sense faculty and an external object (or, in the case of apperception, the internal organ and an immediately prior cognition), and the cognition produced has an objecthood which accurately hits the object in question, the cognition is veridical and has the status *prāmāṇya.*

2.2 *Anumāna* (inference)

NS 1.1.5 defines inference as follows.

> [An inferential cognition] is preceded by that [perception], and is threefold: from cause to effect, from effect to cause or from that which is commonly seen.[14]

This definition is somewhat elliptical. But it focuses on the fundamental character of inference: it is a cognition which follows from another cognition owing to their being conceptually connected in some way. Etymologically, *anumāna* means "after-cognizing" (*anu-māna*). The idea is that inference follows from an earlier cognition, "that" in the *sūtra*

[14] *tatpūrvakam trividham anumānam pūrvavac cheṣavat sāmānyato dṛṣtam ca*.

above. Vātsyāyana interprets "that" (*tat*) to refer to a perceptual cognition, and suggests that perceptual cognition precedes inference in two ways: (i) to engage in inference requires having perceptually established a fixed relationship between a reason or inferential sign and the property to be inferred, and (ii) perceptual input triggers inference in that one must cognize the inferential sign (*hetu*) as qualifying the locus of an inference (*pakṣa*) (NB 1.1.4, 2.1.32; ND 142-6). He provides a more explicit definition of inference as "a 'later cognition' of an object by means of cognition of its inferential sign" (*mitena liṅgena liṅgino 'rthasya paścān-mānam anumānam*) (NB 1.1.3; ND 88).

Uddyotakara reasonably broadens the scope of "that" in NS 1.1.5 to refer to *pramāṇa*-produced cognitions of any kind which may trigger inference (NV 1.1.5).[15] The meaning of reasoning from cause to effect and from effect to cause should be clear. Uddyotakara interprets reasoning from what is "commonly seen" as that which is grounded in non-causal correlations that have proven invariable. Vātsyāyana offers another reading: the target of such an inference is something whose relationship with the inferential sign or probans is not perceptible, but is inferred due to the probans' similarity with something commonly experienced. The classic example of this kind of inference is as follows: Desire, aversion, and knowledge are properties. Substances are required to instantiate properties. Therefore there is a substance which instantiates desire, aversion, and knowledge, a self (NB 1.1.5).

The history of Nyāya's logical theory is extensive and in many instances convoluted. Here, we will note a few salient points and focus on inference as understood in the period

[15] I should note that a significant lacuna in Nyāya's account of inference is that it does not provide much discussion of the deliverances of pure reason. Generally, things like mathematical truths are considered to be definitional, and of little importance. Sometimes mathematical truths are subsumed within *sambhava*, "inclusion" a sub-type of inference (see NS 2.2.2). But aside from this, inference is considered to terminate in knowledge of things "in the world" (including one's own mental states, one's indwelling non-material self, and God).

most important to this study (around 1000 CE, the final great creative period of what is normally known as “Old Nyāya”).[16] First, in Nyāya, logic is subsumed within epistemology, and therefore tends to have a strong informal and psychological flavor, mapping paths of reasoning that generate veridical cognitions and noting the common ways it goes wrong. Fundamentally, one makes inferences for oneself. Formal proofs are meant to mirror the kind of reasoning that takes place internally, for didactic or polemical purposes.[17]

Second, inference is fundamentally triggered by the recognition of a sign or mark, whose relationship with some other object (property or fact) has been firmly established through induction.[18] The primary cause of an inferential cognition is an immediately prior “subsumptive judgment” (*parāmarśa*) which grasps an inferential sign as qualifying an inferential subject (the locus of the inference), while recollecting the sign’s invariable concomitance with some other fact or object. The two fundamental requirements for inference are, therefore, awareness of *pakṣadharmatā*, the inferential mark’s qualifying the locus of the inference, and of *vyāpti*, the sign’s invariable concomitance with the target property or probandum. A paradigmatic act of inference to oneself is: “There is fire on that mountain, since there is smoke on it,” which is supported by the awareness that smoke is invariably concomitant with fire. Naiyāyikas examine and standardize the conditions under which invariable concomitance (*vyāpti*) between a probans and a target fact is established.

---

[16] For useful introductions to the history and conceptual structure of logic in Nyāya, see Potter 1977: 179-208, Matilal 1998 and Ganeri 2001a.

[17] The first explicit recognition of this dual nature of inference is commonly attributed to the Buddhist Dignāga, who coined the terms *svārthānumāna* (inference for oneself) and *parārthānumāna* (inference for another). Other schools adopt this nomenclature. The first Nyāya-Vaiśeṣika author to recognize the distinction is Praśastapāda. See Matilal 1998: 108. I should note, however, that such a distinction is implicit in the *Nyāya-sūtra’s* distinction between inference as a *pramāṇa* (NS 1.1.5) and as a systematic method of proof meant to convince another (NS 1.1.32-39).

[18] This is emphasized in *Vaiśeṣika-sūtra* 9.1, which describes inference as *laiṅgika*, proceeding from a characteristic sign.

Third, as logic's function is to generate veridical cognition, Nyāya makes no distinction between soundness and validity in respect to the quality of an argument. Both formal fallacies and the inclusion of false premises lead to *hetv-ābhāsa*, "pseudo inference," since they engender false cognition. It is, for example, a fallacy to employ something whose existence is unsubstantiated as the subject (*pakṣa*) of one's inference (this is the fallacy of *āśraya-asiddhi*). It is also a fallacy to propose a concomitance (*vyāpti*) without proper inductive support. An apparent inference is defeasible in the face of undercutting defeaters that reveal a failure to meet conditions by which genuine inference may occur, or by counter-evidential defeaters of equal or stronger weight (as will be discussed in Chapter Four). Failures of *vyāpti* are a common reason for failed inferences.[19]

Concerning inference for polemical or didactic purposes, Nyāya employs a formal five-step argument illustrated by the following stock example.

1. There is fire on the hill (the *pratijñā*, thesis).
2. Because there is smoke on the hill (the *hetu*, reason or probans).
3. Wherever there is smoke, there is fire; like a kitchen hearth and unlike a lake (the *udāharaṇa*, illustration of concomitance).
4. This hill is likewise smoky (the *upanaya*, application of the rule).
5. Thus, there is fire on the hill (the *nigamana*, conclusion).

In practice, the five-membered "syllogism" is often truncated into three steps as follows.[20]

---

[19] A summary of standard inferential fallacies is found in *Tarkasaṁgraha* §57-64.

[20] Potter (1977: 186) discusses various Nyāya responses to the charge that the five-step argument pattern contains unnecessary redundancy. Ingalls (2001: 112) notes that the Buddhist Vasubandhu argues that a five-step version is best for formal proofs, while he holds that the three step version is enough for reasoning to oneself.

a is qualified by S,

because it is qualified by T

(whatever is qualified by T is qualified by S) like b(T & S).

Again, the stock example:

The hill is qualified by fieriness

Because it is qualified by smokiness

(Whatever is qualified by smokiness is qualified by fieriness) like a kitchen hearth and unlike a lake.

The basic components of the argument are

- the inferential subject (*pakṣa*), the locus of the attribute; *the hill* in our example.
- the "prover" or probans property (*hetu*); *smoke* (more precisely, *smokiness*)
- the probandum (*sādhya*), the property to be proved by the inference; *fire* (more precisely*, fieriness*)
- the pervasion (*vyāpti*) that grounds the inference, which is implicit in the step: "*wherever there is smoke, there is fire*"
- a corroborative instance (*sapakṣa*); a locus known to be qualified by both the prover (*hetu*) and the probandum (*sādhya*); this is a token of inductive support for the *vyāpti*; *a kitchen hearth.* There are also known negative examples, (*vipakṣa*) of something that lacks both the prover property and the probandum; *where there is no fire, there is no smoke*, *like a lake.* Obviously, an instantiation of the prover property in the *vipakṣa* class vitiates the argument.

This stock inference asserts that there is fire on the mountain (the mountain is qualified by the property of fieriness, Fm).[21] Why? Because the mountain is qualified by the property of smokiness, Sm. There is an implied invariable concomitance which grounds the inference: "Whatever is qualified by smokiness is qualified by fieriness," (x)(Sx → Fx). In the language of Nyāya, fire "pervades" smoke. This is an epistemic pervasion: we never find smoke instances without fire instances. As such, smoke is a *prover* property or probans that allows us to infer the presence of fire. Finally, an example must be included in the syllogism to illustrate the inductive grounding which undergirds the invariable concomitance. In kitchen hearth k, smoke is known to be concomitant with fire, (Sk & Fk). In some instances, negative examples are used to indicate the *vyāpti* through contraposition. Wherever there is no fire there is no smoke, as illustrated in a lake, (~Sl & ~Fl).

Nyāya-sūtra 1.1.25 defines an example (*dṛṣṭānta*) as "something about which experts and laypersons have the same opinion (*buddhi-sāmyam*)." Vātsyāyana (NB Intro.; translation in Gangopadhyaya 1982: 5) elaborates:

> Corroborative instance is an object of perception—an object about which the notions (*buddhi*) of the layman as well as the expert are not in conflict. . . It is also the basis of the application of *nyāya* (reasoning). By (showing) the contradiction of the *dṛṣṭānta* the position of the opponent can be declared as refuted. By the substantiation of the *dṛṣṭānta*, one's own position is well-established. If the skeptic (*nāstika*) admits a corroborative instance, he has to

[21] In Nyāya, the preferred model of inference involves a conception of the prover (*hetu*) and target fact (*sādhya*) as properties (or *locatees*) which are predicated of (*located in*) a locus. See Matilal 1998: 26-30 for an elucidation of this conception of Sanskritic inference patterns.

surrender his skepticism. If he does not admit any, how can he silence his opponent?

Regarding agreement between laypersons and experts, the basic idea, of course, is that supporting examples should be non-controversial.[22] Kishor Chakrabarti (1999: 8) notes that "the evidence cited as observation (or awareness) of co-presence or of co-absence or of a counterexample should be acceptable to both sides in a philosophical (or scientific) debate." Chakrabarti dubs this principle of the *general acceptability of inductive examples*, and rightly emphasizes its centrality in Indian philosophical argument. A good illustration of this is found in Uddyotakara's *Nyāya-vārttika* (2.1.16; ND 436). Debating with a Buddhist interlocutor over the existence of property-bearing substances, he claims "there is no example whatever (*na hi kaścid dṛṣṭāntaḥ*) . . . about which both parties agree (*ubhaya-pakṣa-sampratipannaḥ*)."

Determining the proper criteria for *pakṣa*, *sapakṣa,* and *vipakṣa* membership becomes enormously important in disputed cases like the inferences for God or the self. Since it is a fallacy to use the *pakṣa* itself as a corroborative instance (which would be circular), in cases where the property to be proven is entirely coextensive with the *pakṣa*, Nyāya takes recourse of a wholly-negative inferential form. *Vyāpti* (x → y) is contraposed to (–y → -x), as in the following inference: "A living body has a self because it breathes. Whatever does not have a self does not breathe, like a pot."[23] Issues involving the criteria for corroborative examples and corresponding inferential patterns will be discussed more fully in the fourth chapter.

[22] Uddyotakara (NV 1.1.25) expressly minimizes the need for laypersons to agree with experts, as often laypersons do not have any opinions about specialized subject matters. He says that the crucial issue is that the example be non-controversial.
[23] For helpful discussion of issues involving the wholly-negative inferential pattern, see Matilal 1998: 108-126.

As noted in section 1.1, negotiating inferential relations is the central arena for subject-centered epistemic normativity, especially when the inference is deliberate. Good epistemic agents reason well, avoiding inferential fallacies, and respond appropriately to recognized entailment and challenges. An inferential cognition is the product of an agent's application of her knowledge of a legitimate *vyāpti* between the inferential mark and the *sādhya*, the probandum of the inference. Though this is often discussed in causal language by Nyāya, an epistemic agent exhibits voluntary decisions about which inferential paths to follow. The normativity operative in immediate, and often subconscious inferences-for-oneself, on the other hand, seems to be less agential and more causal, akin to perception. Such inferences are often automatic.[24] Like perception, an inferential cognition must also have objecthood which accurately hits the object in question for the cognition to be veridical and have the status *prāmāṇya.*[25]

2.3 *Upamāna* (analogy or comparison)

NS 1.1.6 defines analogy as follows.

> Analogy makes a thing known by similarity with something already known.[26]

[24] Chatterjee (1978: 226-7) notes that it is hard to draw an absolute line of demarcation between perception and inference, since the boundary often hinges on the development of one's ability to negotiate conceptual relations without conscious thought. "We cannot say that under the same objective conditions the knowledge of an object must always be a perception for every individual and that it can never be otherwise. Nor can we aver that such knowledge must always be an inference for all individuals and that is can never be a perception for any."
[25] I consider Ratnakīrti's attack on Nyāya's theory of inference in Appendix C.
[26] *prasiddha-sādharmyāt sādhya-sādhanam upamānam*. The English word "analogy" poorly captures *upamāna*, the term at issue, which has a very limited scope. But I cannot think of a better term, and "analogy" does fit with the Sanskrit term *upamāna*.

Analogy is commonly framed as a means of vocabulary acquisition,[27] and has a severely restricted scope compared with the other *pramāṇas*. The standard example involves a person who is told that a water buffalo looks something like a cow and that such buffalo are present in a certain place in the countryside. Later, when out in the countryside, he recognizes that the thing he is seeing is similar to a cow, and therefore is a water buffalo. The cognition "That thing is a water buffalo," born of the recollection of the testimony regarding its similarity with a cow and the perception of such common features, is paradigmatically analogous. Though most of the other schools either reduce analogy to a more fundamental *pramāṇa* or conceive of it in very different terms (Mīmāṁsā conceives of it as the capacity by which we apprehend similarity itself), Nyāya contends that the cognition in question is *sui generis* analogical, though it incorporates information from other *pramāṇas*.[28]

Since analogy has a severely restricted role for Nyāya, I will not give it the attention I give other the knowledge sources. Moreover, I do think that it is best reduced to other *pramāṇa* types, particularly testimony.[29]

---

[27] See Kumar 1994: 13-6, Chaterjee 1978: 299-314, and Phillips 1995: 56.

[28] See Udayana's *Nyāya-kusuma-añjali*, third chapter (Dravid 1996: 263).

[29] Datta 1978: 299-314 provides a clear account of Nyāya's defense of *upamāna* as a separate *pramāṇa*. Datta himself defends Nyāya's conclusion. In short, he agrees that an element of *upamāna* is testimonial (the subject is told "a water buffalo looks much like a cow, and is present in that region"), another element is perceptual (the subject notes "that looks like a water buffalo, according to the description I was given"), and another part inferential (the subject can recognize the conceptual relations by which we may identify relevant likeness between the water buffalo and the cow). Nevertheless, he argues that "the *application* of a concept to a particular class of things cannot be due to perception or testimony [or, presumably inference]" (311).

To me, it seems excessive to require a new *pramāṇa* to account for the knowledge that a name (or concept) applies to a particular class of things. Indeed, we can imagine a case where someone who knows nothing about football is told "people who stand on the sidelines of a football game, leading songs, dancing, and waving pom-poms are called 'cheerleaders.'" The same person later goes to a football game, sees the cheerleaders, and remarks to himself "those are the people called 'cheerleaders.'" In this case, there is no explicit analogy employed to assist comprehension. Still, it is akin to the case of the water buffalo, in that one is first introduced to a name and given a description of its proper referents, and then comes to realize that the name applies to particular class through experience coupled with recollection of the instructions given. In the cheerleader case, would we need a fifth *pramāṇa*, which does not rely on similarity, but still engenders knowledge of the relationship between a name and a particular class of things?

2.4 *Śabda* (testimony)

One virtue of Nyāya is its long-standing defense of testimony as an irreducible *pramāṇa*.[30] NS 1.1.5 defines testimony as

> The assertion of one who is credible.[31]

The semantic range of *āpta* ("authority," "credible person") includes expertise, trustworthiness, and reliability. Vātsyāyana claims that an *āpta* possesses direct knowledge of something, is motivated by a desire to share such knowledge, and is capable of doing so (NB 1.1.7). It is clear, though, that Nyāya does not require any kind of special expertise from such a speaker in normal situations. The late Nyāya manual *Tarkasaṁgraha* (§66) thus glosses *āpta* as merely "a person who asserts things as they are" (*yathārtha-vaktā*). Nor does a hearer need positive evidence of trustworthiness. Mere absence of doubt in the asserter's ability to speak authoritatively about the issue at hand is enough.[32] Testimony is thus thought of as a transmission of information or content which is dependent on other *pramāṇas*. A person attains an accurate cognition through some *pramāṇa*. In a properly functioning

---

The "similarity" at work in Nyāya's example of the water buffalo is incidental if the real issue at hand is the understanding of the relation between names and referents. I think it best to understand such knowledge is testimonial, and to take the recognition that a name applies to a thing or class of things in view as the development of conceptual competence, which is not a *pramāṇa,* but a skill.

[30] Nyāya's defense of testimonial anti-reductionism has been explored by Chakrabarti 1994, 2000 and Mohanty 1994.

[31] *āpta-upadeśaḥ śabdaḥ.*

[32] Mohanty (1994: 31) claims that for Nyāya, legitimate instances of testimony require that "the utterer must be known to be competent" in advance. But this requirement is too strong, and not representative of Nyāya attitudes toward testimony. The hallmark of testimony for Nyāya is that in the absence of known defeaters, uptake and belief are fused, without need to verify the standing of the testifier. As evidence for this, it may be noted that *Nyāya-sūtra* 2.2.1-2 includes *aitihya* (tradition), defined by Vātsyāyana as a statement which is long accepted but whose original speaker is unknown, within testimony. In this case the original speaker is not known at all.

testimonial exchange, she bestows the information apprehended by said cognition to an epistemically responsible hearer. On such grounds, Uddyotakara notes that testimonial utterances may be divided into those whose contents are originally generated by perception or by inference (NV 1.1.8). Jayanta likewise claims that "the veridicality or non-veridicality of a testimonial cognition is dependent on the speaker's perception [of the fact(s) conveyed]. If he saw things properly and is honest, then the meaning of the utterance is true. If not, it is false."[33] Vātsyāyana (NB 2.1.69) illustrates a levelheaded frankness about testimony's importance, noting that "in accord with knowledge gained by testimony, common affairs of people are carried out."[34] Uddyotakara (NV 1.1.3) remarks that testimony has the widest range of any source of knowledge, far outstripping what one may know from personal perception, inference or analogy.

As will be discussed in the fifth chapter, the "belief-transfer" view of testimony embraced by early Nyāya is rightly rejected by Gaṅgeśa, in favor of a view which focuses on the veridicality of the testimonial statement itself, irrespective of status of the speaker's belief. In this mature view, the normative status of a testimonial cognition is largely a product of the causal connection between testimonially-produced cognitions and the facts which they purport to convey.

As is clear from the foregoing, Nyāya's knowledge sources are not all "in the head." Whether the deliverance of a putative testimonial exchange is veridical, for example, depends on the status of the testifier, though the subject's own linguistic competence, etc. are part of the causal story to be told.

---

[33] *Tasyāḥ śabda-janitāyāḥ pramiteḥ yathā-artha-itaratvam puruṣa-darśana-ādīnam samyag-darśini śucau puruṣe sati satya-arthā sā bhavati pratītiḥ itarathā tu tad-viparītā iti.* Jayanta Bhaṭṭa, *Nyāya-mañjarī,* ed. K. S. Varadacarya (Mysore: Oriental Research Institute, 1969), p. 482. Jayanta also suggests that the primary excellences and faults which generate veridical and non-veridical statements are psychological traits of a speaker which lend themselves to sincerity and insincerity, respectively.

[34] *Tathā ca sarveṣām vyavahārāḥ pravartanta.*

There are other important epistemic capacities which are nevertheless considered non-*pramāṇas* by Nyāya. They are not considered *pramāṇas* for one of two reasons: (i) they are reducible to subspecies of other *pramāṇas*, or (ii) they do not produce the specific kind of cognitions which a *pramāṇa* must deliver. The following is a discussion of some of the most important non-*pramāṇa* knowledge sources and why they are rejected by Nyāya.

2.5 *Arthāpatti* (postulation)

This is a pattern of reasoning which has been compared to transcendental argument,[35] but also seems akin to inference to the best explanation. It produces knowledge of some *x* which is needed to account for phenomenon *y*. A standard example is as follows: Devadatta is getting increasingly fat, but no one sees him eat during the course of the day. Given these two facts, we postulate that he must eat at night when no one is around. That *Devadatta eats at night* is the content of the cognition generated by *arthāpatti.*

Vedāntins and Mīmāṁsakas consider postulation a separate *pramāṇa*, but Nyāya argues that it is reducible to a subspecies of inference (NS 2.2.2). As will be discussed extensively in chapter four, Nyāya has a principle, *pakṣa-dharmatā-bala* ("the strength of the reason's qualifying the inferential subject"), which allows one to articulate the details of a *sādhya* (the "target fact" of an inference) according to the requirements needed to account for the reason's qualifying the *pakṣa* in the inference which produces it. This principle, as noted by Raghunātha (In Udayana 1998: 832-4) is a kind of *arthāpatti* which is nested within standard inference.

2.6 *Anupalabdhi* (non-apprehension)

[35] Mohanty 2000: 32.

Some schools, notably the Bhāṭṭa Mīmāṁsā, argue that non-apprehension is an independent *pramāṇa* which cognizes absences. Their argument proceeds by elimination: none of the recognized *pramāṇas* are able to generate knowledge of an absence, and we do have genuine knowledge of absences. So a sui-generis *pramāṇa* is required.[36] Naiyāyikas retort that knowledge of absences is accounted for by means of the standard knowledge sources.[37] Knowledge of an absence consists in knowledge of a positive entity which is conceived of as the locus of the absence which qualifies it. Absences are relational, relating loci to their absentees. The perceptual connection required for absence is included as the sixth on Uddyotakara's list: qualifier-qualified or characterizer-characterized relation (*viśeṣya-viśeṣaṇa-bhāva*). The perceptual faculty comes in contact with a substantive (*viśeṣya*) which is qualified by an absence (*viśeṣaṇa*). *Viśeṣaṇa* has a cognitive sense. It is a property of something as experienced. In veridical cognition, it corresponds to a real property (*guṇa* or *dharma*) possessed by the thing in question. Here, the absence is understood to qualify an existing entity. The following is Aṇṇam Bhaṭṭa's explanation.

> For the perception of some absence, 'characterizer-characterized' is the operative relation. The reason is that in the perception of 'the ground as characterized by the absence of a pot', 'the absence of a pot' is the characterizer of the ground which is in conjunction with the [visual faculty]. (TS 48, translation by G. Bhattacharya 1977)

He further comments.

[36] Kumārila's *Ślokavārttika*, Abhāva chapter and Bhatta 1962: 341-67.
[37] See Bijalwan 1977: 275-6 for a summary of Jayanta's critique of the Bhāṭṭa position.

> By this is repudiated the distinctiveness of non-apprehension (*anupalabdhi*) as a *pramāṇa* or special means of knowledge. *Anupalabdhi* cannot possibly be [accepted as] a distinctive means of cognition, if the cognition of absence can be accounted for by a sense-organ alone, as accompanied by a non-apprehension which goes counter (*virodhi*) to the presence of the negatum (*pratiyogi-sattva*), that is entailed by an argument (*tarkita*) of the form "if there had been a pot, then it would have been perceived like the ground; since it is not perceived, it does not exist." (Commentary on TS 48, translation by G. Bhattacharya (1976: 177-8).

Perception of absence is thus infused by the recollection of the object which is absent and the awareness that it is not present in the original cognition. Vātsyāyana argues that the positive knowledge produced by a *pramāṇa* gives immediate rise to knowledge of an absence insofar as one can reflect that if something was not made manifest at the time of the initial cognition [and provided that the thing in question is ordinarily cognizable], it was absent. That an elephant is absent from my office is given to me by my merely looking in my office. I need only attend to the content of the original perceptual cognition of my office to see this. Of course, to recognize the absence of an elephant, I must, for some reason, be interested in the question, and have the correct concept of an elephant. But the existence of the absence is itself given in the original perception. Vācaspati (NVT 1.1.3) notes that knowledge of absence is often reducible to inference, as does Vātsyāyana (NB 2.1.2; also see NS 2.2.2).

2.7 *Aitihya* (tradition)

Vātsyāyana defines *aitihya*, tradition, as an utterance which is long-accepted in the form "It is said thus," but whose original speaker is untraceable (NB 2.2.1). As such, an average adult's historical and cultural knowledge would largely be produced by tradition. Nyāya reduces tradition to *śabda*, testimony (NS 2.2.2). This reduction underscores the fact that a testifier's status as reliable need not be known for her utterance to provide testimonial knowledge. Though Naiyāyikas do not put it in such terms, it is clear that in the case of tradition, the authority behind the utterance is more dispersed—it takes the form of trust in one's community, which preserves the assertion. This feature of testimony—that it rests on what may be called *diffused authority*—distinguishes it from ordinary cases of testimony, whose authority can be traced to that of an original speaker.

2.8 *Smṛti* (memory)

Though mnemonic cognitions may indeed be *yathārtha*, correspondent to the object or fact remembered, for most Indian schools memory is not a *pramāṇa*.[38] There are various reasons for this given by Naiyāyikas.[39] The strongest argument that Nyāya provides is that memory's function is purely preservative. It stores and makes possible the retrieval of the content of *pramāṇa*-generated cognitions, but does not generate new veridical content itself. Aṇṇam Bhaṭṭa (TS §35) thus defines mnemonic cognitions as "solely born from a *saṁskāra* (stored impression)." Some schools attempt to exclude memory from the ranks of *pramāṇa* by including a requirement that *pramāṇa*-born cognitions "reveal new information," but Nyāya avoids this approach. Jayanta (Bhattacharyya 1978: 43) attacks this view in his *Nyāya*-

---

[38] See Chaterjee 1978: 372-374 for notable exceptions including some Vaiśeṣikas.

[39] See Potter 1977:172-3 for a partial catalogue of Nyāya-Vaiśeṣika perspectives on memory's standing as an epistemic faculty.

mañjarī, noting that one may have a *pramāṇa*-born cognition of the same object, moment after moment.

2.9 *Tarka* (suppositional or dialectical reasoning)

As mentioned in section 1.3, *tarka* is a kind of reasoning which is crucial to Nyāya's philosophical program. Still, according to Vātsyāyana, it is not a full-fledged *pramāṇa*. Rather it is an "assistant to the *pramāṇas*" (*pramāṇa-anugrahaka*) (NB Introduction; ND 53-5). It is commonly employed as a kind of *reductio* argument for the sake of judging competing claims or arguments, a *reductio* which depends not only on logical inconsistency, but on incoherence with deeply-held beliefs or norms. In the face of competing claims *x* and *y* about subject *s*, *tarka* is employed to show that *x* violates such norms, thereby shifting the presumptive weight to alternative *y.* Vātsyāyana (NB 1.1.40) offers the example of competing claims about the nature of the self. Some say that the self is a product which comes to exist within time while others claim that it is unproduced and eternal. The Naiyāyika deploys *tarka* by arguing that a consequence of the former view is that one's initial life circumstances would not be determined by his karmic inheritance from previous lives, a severe violation of fundamental metaphysical positions held by almost every Indian school. As such, strong presumptive weight should be given to the latter view. This example illustrates how considerations of negative coherence govern *tarka's* deployment.

Vātsyāyana notes that the reason *tarka* is not an independent *pramāṇa* is that it does not independently establish the nature of the thing in question (*anavadhāranāt*). It provides consent (*anujānāti*) for one of two alternatives independently supported by apparent *pramāṇas*, by illustrating problems with the competing view. Uddyotakara (NV 1.1.1; ND 53) adds that it is excluded from the

ranks of *pramāṇa* because it does not provide definitive cognition (*pramāṇam paricchedakaṁ na tarkaḥ*).[40]

Later Naiyāyikas extol *tarka* as a means to test dubious inferential concomitances (*vyāpti*) by testing them against more fundamental holdings of various sorts. *Tarka* also has a crucial role, as noted by Ganeri (2001:151ff), in the management of doubt. As seen in the previous chapter, not all doubt is held to be reasonable, and *tarka* helps to distinguish legitimate doubt from mere contentiousness by illustrating which claims are better motivated and hence deserving of presumptive weight.[41]

2.10 *Anuvyavasāya* (apperception)

Nyāya holds that while cognitions manifest (*prakāśaka*) their intentional objects, they rarely manifest themselves. When they are directly cognized, cognitions are grasped by other, apperceptive cognitions. As apperceptive awareness reveals a cognition along with its objecthood (i.e., my cognition of a red truck is apperceptively cognized as having the predication content "red" and "truck-hood"), it is practically infallible.[42] But, as Gaṅgeśa (Phillips/Ramanuja Tatacharya 2004: 95) notes such infallibility does not gain purchase on whether the original cognition (the object of the apperceptive awareness) holds true for its object. Apperception is subsumed by Nyāya into the category of perception. In this case, the

[40] In NV 1.1.40, Uddyotakara notes that some Naiyāyikas (whose works are lost to us) have argued that *tarka* is best understood as a special form of inference, while others have held that it is reducible to other kinds of cognition, like doubt.
[41] See the translation/commentary on Śrīharṣa and Gaṅgeśa in Phillips 1995: 151-64 for important discussions of *tarka*.
[42] I say "practically infallible" because, as Phillips (2004: 331) notes, "This apperceptive evidence is not said to be infallible. Rather it is decisive because it is in fact undefeated, not because it is indefeasible." This formulation concords better with Nyāya's notion of "extrinsic determination of veridicality."

operative sense faculty is the "inner organ" (*manas*) and the object is a cognition conceived of as an episodic property of a self. Gaṅgeśa (Phillips/Ramanuja Tatacharya 2004: 575-608) argues at length with Prābhākara Mīmāṁsaka, defending Nyāya's version of apperception as theoretically and phenomenologically more compelling than the view that each cognition itself has a reflectively self-aware component.

A few words on *manas* (the inner organ): NS 1.1.16 argues that the absence of simultaneous cognition from all of the senses indicates the presence of a faculty which governs selective attention. The *manas* is identified as this faculty, an insentient psychological apparatus which processes the information of the senses. A formulation of perception by the Vaiśeṣika school (VS 3.1.18), accepted by Nyāya, is that it normally consists in a chain of connection between four things: a self and its *manas*, the *manas* and a sense organ, and the sense organ and an object. *Manas* is also is the faculty which governs mnemonic retrieval and, as noted above, apperceptive awareness of mental states. Selves, in the Nyāya view, are fundamentally loci of awareness, cognition, and mnemonic dispositions (*saṁskāra*). But alone, selves do not have cogitative power and rely on *manas* for the functioning of memory and apperception.

2.11 Transitional discussion: the default status of cognitions regarding Īśvara (God)

Nyāya theism is centered on the contention that belief in God's existence is the product of *pramāṇas*. In consonance with the epistemological picture given here and in Chapter One, from the Nyāya perspective, ordinary theistic belief is best understood as a common, often unreflective, *pramāṇa*-born occurrence, the product of testimony (of scripture, trusted elders, etc.) or a fairly simply inference from the created features of the world to a creator.

Occasionally, as will be seen, yogic or religious experience is cited in support of theistic belief as well.

I think that, excepting the simple inference just mentioned, this attitude is fairly correlate to Plantinga's (2000, 2007, etc.) contention that theistic belief may be "properly basic," that it "can be accepted with perfect rationality even if the believer doesn't have any good arguments for this belief" (2007: 614). In the introductory portion of the *Nyāyakusumāñjalī,* Udayana speaks of the ubiquity of theistic belief, and suggests that practically everyone, irrespective of sectarian affiliation, has a baseline, core belief in the deity: followers of the Upaniṣads speak of God as the being whose nature is pure sentience; followers of Yoga see him as a unique liberated soul; Śaivites worship him as Śiva; Vaiṣṇavas as Viṣṇu and so on. Udayana notes that given such universal agreement, doubt about the existence of God, the condition for further review and defense of theistic belief, should not arise (Dravid 1996: 3-6).[43] Clearly this claim is a rhetorical flourish since Udayana immediately proceeds to outline various arguments against God's existence, to which his book is a sustained response. Rhetoric aside, the passage serves the purpose of underscoring his view that at the level of cognitions trusted on a default basis, theistic belief is quite common, and therefore his challengers bear the burden of proof.[44] Such challengers hailed from many camps, both within and outside the pale of Hindu culture. As will be elaborated below, the arch-conservative Mīmāṁsā school, the orthodox Sāṁkhya, the heterodox Buddhists and Jains, and the materialist Cārvākas are all united in their opposition

[43] Analogous to the default status of belief in *Īśvara* is the status of trust in the Veda. This is hinted at in NV 2.1.59, where Uddyotakara responds to an interlocutor that since he (the interlocutor) aims at undermining the status of the Veda and Uddyotakara is not trying to establish the Veda's authority (since he presupposes it), Uddyotakara need only argue defensively.

[44] Chemparathy (1972: 81-2) considers whether this passage may be considered a kind of "historic or ethnological proof." I (like Chemparathy) am dubious of this, since, clearly, Udayana's intention is rhetorical. Among the persons he mentions in the passage are the staunchly materialist Cārvākas and the atheistic Mīmāṁsakas, two schools whose proposed "theism" is so distant from the conception of *Īśvara* that Udayana could not think them fellow devotees in any sense.

to *īśvara.* Such opposition (*vipratipatti*) is recognized by Nyāya as an occasion for doubt, review, and rational defense of belief by appeal to *pramāṇas* (NS 1.1.23). In my study, I have not found that Nyāya provides much-needed nuance to their theory of doubt in the face of disagreement or dialectical challenge (see section 1.3). Still, at the least, Nyāya philosophers saw that the duty of the intellectuals within a tradition is to respond to legitimate challenge and in doing so defend the putatively veridical cognitions supporting metaphysical holdings of various kinds.

The next three chapters will discuss theistic belief in relation to the three main *pramāṇas* of perception, inference and testimony. The discussion of perception will not presuppose a post-doubt context of debate, though classical objections to the legitimacy of religious experience will be considered. The discussion of inference, on the other hand, tends to assume the loss of default status triggered by opposing counterarguments. Though the inference which purports to establish a creative intelligence behind the structure of reality may occur in non-dialectical contexts, it is almost invariably cited and developed as a response to atheistic argument. Testimonial cognition, like perception, tends to be operative pre-doubt. But, as will be seen, reflection on what exactly the Veda says, and the nature of the Veda as testimony, are debated in a post-doubt context.[45]

[45] I should note that Jayanta (1969: 481) also mentions that when religious endeavors require much work and sacrifice, they naturally lead the persons undergoing the sacrifice to reflect on the epistemic status of the injunctions.

Chapter 3: Yogic Perception

3.0 Introduction: Yogic Perception in Indian Tradition

Chapters One and Two have explored *pramāṇa* theory as developed by Nyāya. The next three chapters will consist of an examination of whether Nyāya's *pramāṇas* are capable of adequately grounding Nyāya's theism, primarily in an adversarial context. I will focus on the classical debates and arguments, though I will continue to consider how Nyāya's arguments would stand or could be made to stand in light of contemporary objections and considerations.[1] Following the traditional order in which *pramāṇas* are listed, we will begin with perception.[2]

Is perception capable of supporting theistic belief? At first glance, the verdict is clearly negative. Even if a being like God exists, many theists, Naiyāyikas included, commonly accept that God is by nature imperceptible. Vācaspati (Anantalal, ed. 1996: 566) claims that God is not a proper object of perception (*darśana-anarhatā*), as he (God) is not composed of perceptible matter. Udayana (NKM Chapter 3; Dravid 1996, 211) agrees: God is categorically beyond the range of perception as commonly understood.[3] In this regard,

[1] The degree to which religious experience has been a topic in contemporary epistemology is somewhat surprising. It is central in recent work of leading epistemologists like Alston (1991) and Plantinga (2000). It has also been treated in some length in textbooks and collections like Taliaferro 1998, Greco/Sosa 1999 and Audi 2003. Clark 1993 is a collection of memoirs by various contemporary theistic philosophers which includes much discussion of personal religious experience and its influence on their work.

[2] A further note about the character of this chapter. More than any other, this chapter will require philosophical forensics and creative elaboration of positions. While Nyāya advocates yogic experience as a legitimate means of knowledge, it tends not to elaborate on it very much, particularly in support of the existence of God. Our philosophers are, by and large, philosophers and not (to our knowledge) mystics. Vācaspati Miśra, commenting on the *Yoga-sūtra*, tells us that "this is what the yogis say," suggesting that his knowledge is second-hand. Praśastapāda depicts yogis as "those unlike us." Moreover, Nyāya champions inference as the way to establish God *par excellence.* In conversation, Stephen Phillips has remarked that as yogic perception is advocated by various non-Vedic schools, especially Buddhism, in support of their claims, Nyāya philosophers may well be prejudiced against citing it because of such taint.

[3] Also see Jayanta 1969: 491.

God is held to be like atoms, selves, and other such entities which are imperceptible to ordinary vision. One important consequence of this conception of God, noted by both Vācaspati and Udayana, is that mere non-perception (*anupalabdhi*) of God provides insufficient grounds to reject theism. Non-perception is only capable of establishing the absence of things that are fit to be perceptually cognized.[4]

The perceptual question should not be dismissed so quickly, however. From at least the Upaniṣadic period, Indian thought embraced meditational practices of various sorts and held that such practices enhance a person's cognitive faculties. To put it slightly differently, meditation and other practices of self-discipline are thought to help one develop latent faculties which are ordinarily dormant. Udayana has said that "The difference between yogins and ordinary people like us is that by dint of their power, common obstacles to cognitive efficacy are removed" (NVTP 3.1.17).[5] At times, such development is described in ways that are non-controversial. The *Bhagavad-gītā*, for example, notes that developing *sattva*, a psychological disposition which tends toward dispassion and truthfulness, makes one a more competent judge of experience (*Gītā* 13.8-12, 14.6). Beyond this, however, texts like the *Gītā* describe much greater kinds of cognitive enhancement, which allow a subject access to heretofore unavailable objects of experience. Commonly, the disciplines which allow for this are called *yoga.* Accomplished yogins are said, for example, to experience the eternal, indwelling self that is normally obscured to our ordinary awareness.

---

[4] A concern to restrict the scope of non-perception's ability to rebut the existence of putatively existing things has a long history in Nyāya, going at least as far as NS 3.1.36 *na anumīyamānasya pratyakṣato 'nupalabdhir abhāva-hetuḥ,* "the absence of perceptual cognition is no reason to reject the existence of something inferable."

[5] *śakter apratighātādity asmadādito viśeṣa.* In the same passage, he strongly admonishes those who cite yogic power as a way resolve logical absurdities. By claiming that yogins are like us, only more powerful, his point is to argue that their cognitive power is not beyond the laws which govern cognition and causal relations more generally (*kārya-karaṇa-svabhāva-anatikrameṇa*).

> By meditation (*dhyānena*), some see (*paśyanti*) the self . . . others do so by the yoga of analysis (*sāṁkhya*-*yoga*). And yet others through the yoga of action (*karma*-*yoga*). (Gītā 13.25)[6]

Epic literature abounds with tales of hermits, sages, and yogis who live on the outskirts of society in order to perfect their meditative practice. The *Mahābhārata* offers various accounts of such practice, particularly in the *Mokṣa*-*dharma* section of the text.[7]

The Yoga school (along with other yoga traditions) systematizes the meditational traditions inherited from Indian antiquity. It develops conceptual maps for the practice of yoga and provides a theory for the various practices and experiences described in the epics, Upaniṣads, and other literature. The *Yoga*-*sūtra* (the school's root text) teaches that an individual's cognitive (and in some cases conative) powers are augmented by focusing one's intent through meditation. Such radically honed focus is called *saṁyama* (YS 3.1-4). The mental condition strived for is *ekāgratā*, one-pointedness (YS 3.11). This allows one to penetrate into the deep reality of an on object or fact. Though *saṁyama* allows for yogic insight into the nature of the world and its objects, the ultimate success of the yoga practice described is a cessation of the fluctuation of thought (*cittā*-*vṛtti*-*nirodha*), resulting in an immediate experience of a non-material self (YS 1.2-3, etc.). Many yogic themes or theses are held in common by Hindus, Buddhists and Jains, and seem to originate in the earliest Upaniṣads, from about 800 BCE.

This chapter is concerned with yogic experience, which purports to capture sub-surface realities of the kinds discussed in yoga literature, broadly construed. I consider yogic

---

[6] *dhyānena ātmani paśyati kecid ātmānam ātmanā*
anye sāṅkhyena yogena karma-yogena ca apare

[7] See Brockingham 2005.

experience something akin to what we commonly call religious experience or mysticism.[8] For our purposes, I will not provide necessary or sufficient conditions for yogic experience or restrict such experiences according to systematic concerns. Such experience is commonly understood as purporting to reveal fundamental realities normally hidden to ordinary awareness, and are often epistemologically privileged by particular communities of belief. Unlike Stace (1960), whose characterization of mysticism is far too narrow, I would like to include more than the radical annihilation of the subject/object distinction under the banner of mystical experience. And while I respect Alston's (1991:34-5) concern with the looseness of the phrase "religious experience", I think that the context provided within this chapter helps alleviate the fear that anything at all related to the "inner" content of religious life may sneak in under its banner. I tend to agree with James's (1902: 317) approach, which does not attempt to provide necessary and sufficient conditions for mystical experience, but suggests various marks by which it is generally characterized.[9]

In Indian literature, yogic experience is often described in perceptual terms (using words like *pratyakṣa*, "perception" or derivations from the verbal root √*dṛś*, "to see"). Nyāya classifies it as a kind of perception, albeit non-ordinary (*alaukika pratyakṣa*), anticipating the approach of modern philosophers like Wainwright (1981) and Alston (1991). The *Yoga-sūtra* (I.49) speaks of *samādhi*, a state of unparalleled yogic contemplation, producing a kind of direct awareness of the underlying reality of things upon which a yogin focuses. Commenting on this sūtra, Bryant (2009: 161) connects it with the Sāṁkhya traditions which emphasize *para-pratyakṣa*, "higher, supreme, supernormal, perception." He

---

[8]For helpful reflections on phenomenology vis-à-vis the criteria for religious experience, see Wynn 2008.

[9] Yandell (1993: 15) frames such experience as rooted in belief traditions: "What I mean by 'religious experience' is simply an 'experience doctrinally and soteriologically central to a religious tradition.'"

further notes that the contention of the Yoga school is that its insights are experientially grounded in such supernormal perception.

Among the putative objects of yogic experience, we are particularly interested in God. Could God be (putatively) experienced in ways that are at least analogous to perception, such that resulting belief in God is justified or knowledge of God arises? Ancient sources claim that this is possible. *Svetaśvatāra Upaniṣad* (1.14) offers a metaphor comparing awareness of God to the kindling of fire, which is dormant in wood and ready to manifest in the right conditions. Repeated meditation upon the sacred syllable *oṁ* is given as an analogue of kindling wood, and the experience of God as fire's erupting from the wood.

> When one makes one's own body the bottom slab and the syllable *oṁ* the upper drill, by twirling it constantly through meditation (*dhyāna-nirmatana-abhyāsāt*), one would see (*paśyet*) God (*devam*), just as one would the hidden thing. (Olivelle 1992: 417)

Muṇḍaka Upaniṣad (2.2.8):

> When one sees (*dṛṣṭe*) him—both the high and the low;
> The knot of one's heart is cut, all doubts are dispelled;
> And his works come to an end. (Olivelle 1992: 447)

Bhagavad-gītā (11.54):

> Only by exclusive devotion (*bhaktyā ananyayā*) may I be known (*jñātum*) in this way, and seen (*draśtum*) and entered into, Arjuna.

The classical texts strongly suggest that an epistemic agent should embark upon some kind of discipline in order to develop the requisite cognitive faculties. Though random mystical experiences may occur, they are not the norm. The *Svetaśvatāra Upaniṣad* advocates meditation upon the sacred *oṁ*, which the Yoga tradition identifies as a form of God manifest in sound (see YS 1.27 and its commentaries). The *Bhagavad-gītā* advocates bhakti, or self-sacrificial devotion, which prepares one for God's grace.[10]

3.1 Nyāya-Vaiśeṣika's Treatment of Yogic Experience

How do the ancient traditions endorsing yogic experience inform the epistemological reflection of the classical philosophers, in particular the Nyāya-Vaiśeṣikas?[11] Despite their tendency to ground analyses of *pramāṇas* by appeal to common experience, the foundational texts for Nyāya and Vaiśeṣika do recognize yogic states as productive of veridical experience of a kind unavailable to ordinary people. *Vaiśeṣika-sūtra* 9.1.11-14 addresses the topic of meditative experience, and claims that perception of the self (*ātma-pratyakṣa*) is the product of a "distinct kind of connection between one's *manas* (internal organ, "mind") and one's self" (*ātmani ātma-manasoḥ saṁyoga-viśeśāt*). Vaiśeṣika also states that "sagely cognition" is produced from an accumulation of karmic merit (VS 9.2.13) or the "merit born of yoga" (Śaṅkara Miśra's commentary on VS 9.1.14). It further provides a general definition of yoga

---

[10] Some texts, like the Vedāntic *Yatīndra-mata-dīpikā* (1.16) distinguish between yogic experience proper, which is born of yoga practice, and mystical experiences born purely of God's grace. Given that this distinction is not widespread, and *bhakti* is itself considered a kind of yoga in the Gītā, I will ignore this distinction in this chapter.

[11] Nyāya and Vaiśeṣika, while distinct schools, had much affinity and mutual influence. By 1000 CE or so, in the work of Udayana, the two became irrevocably fused. I will sometimes speak of them as one broad tradition when appropriate.

as a state of tranquility engendered by the inner organ's (*manas*) repose in the self (VS 5.2.16).

What is meant by *perception of the self*? This kind of self-awareness is distinguished from an apprehension of a unified center of one's conscious states which is normally available upon reflection. Rather, in a way akin to that described in the *Yoga-sūtra* and its commentaries, Nyāya-Vaiśeṣika holds that it is an immediate awareness of one's eternal, indwelling self, unobscured by the contingencies heaped upon it in this life. Śrīdhara thus remarks,

> By ourselves the self is always cognized in the character of the *doer* and the *possessor* as expressed in the notions of "I" and "mine"; both these character[istics] however are due to the connection of the self with such limitations as those of the body, etc., and they are not natural to the self . . . the natural form of the self is perceived by the yogis alone.
> (Trans. Jha 1982: 412)

Various kinds of allied states, akin to what we would call parapsychology or ESP, are often included in the category of yogic perception. These include the ability to apprehend ordinarily imperceptible entities of various sorts. So, Praśastapāda:

> As for persons unlike ourselves-e.g. yogis in [*samādhi*] there appear precisely true cognitions of the real form of things as their own self as well as the selves of others, space, time, atoms, air, *manas*, the qualities, actions, universals, and individuators inhering in these, and inherence; and the

> cognition of these is brought about by the mind as aided by properties or faculties born of yoga.[12] (Slightly modified translation of Jha 1982: 392)

Early Nyāya also resonates with the early Yoga tradition. As Bulcke (1968) and others have noted, the descriptions of God amongst early Nyāya commentators is clearly influenced by the theistic *sūtras* of the *Yoga-sūtra* and its principal commentaries.[13] Moreover, *Nyāya-sūtra* 4.2.46 explicitly mentions the classical yogic texts, directing a student to them for guidance in contemplative practice.[14]

> For that purpose [that is, for enlightenment], there should be purification of the self through restraints and observances and other methods of spiritual discipline given by the Yoga tradition.[15]

Nyāya-sūtra 4.2.38-45 claims that yoga practice (glossed as "a special practice of *samādhi*", *samādhi-viśeṣa-abhyāsa*) gives rise to cognition of truth (*tattva-jñāna*). Vātsyāyana explains:

> There is a special kind of connection between the focused *manas*, which has become withdrawn from the senses by an effort of concentration, and the

[12] I should note that some Naiyāyikas have taken the claim that yogis apprehend things like atoms and ultimate individuators (*viśeṣa*; roughly akin to haecceities) to be pious rhetoric. The brilliant Raghunātha, an influential late Naiyāyika, has said "Yogis are said to see ultimate individuators. Well, let them be asked on their oath whether they see ultimate individuators or not" (modified translation of Ingalls 1951: 38). *Yoga-sūtra* 1.49, it should be noted, explicitly says yogic experience grasps individuators (*viśeṣa-artha*)

[13] Particularly, see Vātsyāyana's description of the nature of *īśvara* (NB 4.1.21), which resonates much with the "theistic *sūtras*" of the *Yoga-sūtra*.

[14] There are instances where Nyāya targets the Yoga tradition for criticism, especially in the Metaphysical polemics of the third book of the *Nyāya-sūtra*. There, Gautama (and numerous commentators) severely criticize the Yoga conception of *buddhi*, a psychological faculty which is paramount in all experience, and the Yogic notion that worldly bondage is due to mere non-discrimination between the self and insentient matter.

[15] *tad arthaṁ yama-niyama-abhyātma-saṁskāro yogāc ca abhyātma-viddhy upāyaiḥ.*

self—a connection which is generated by the intense eagerness to realize truth. That connection being established, no cognitions are generated regarding the objects of the senses. There arises cognition of truth by such focused effort. (NB 4.2.38; ND 1090)[16]

Obviously "truth" (*tattva*) is here a rich notion, akin to the English "Truth". This cognition of truth is distinguished from ordinary veridical cognition in two ways. It (i) destroys the subject's false sense of self (*ahaṁkāra*), and is therefore productive of enlightenment (NS 4.2.1). And according to Vātsyāyana it also (ii) excludes cognitions produced by sense-faculties. As I understand this claim, it need not contradict the Vaiśeṣika notion that some kinds of yogic experience are mediated by sense faculties. A certain sort of yogic experience is, however wholly divorced from their input. Vātsyāyana (NB 4.2.41) speaks of such experience as produced by a faculty or capacity which is honed by yoga practice.[17]

In passing, I will note that Nyāya's Buddhist opponents also accept yogic experience as a kind of veridical perceptual state. Those in Dharmakīrti's line, as noted by McDermott (1991: 149), accept that that the Four Noble truths of Buddhism are directly apprehended in yogic insight. "*Yogipratyakṣa* [yogic perception] . . . alone affords a full penetration into the nature of the Four Noble Truths of Buddhism and their sixteen aspects."[18] Taber (2004: 179

[16] *sa tu pratyāhṛtasya indriyebhyo manaso dhārakeṇa pratyatnena dhāryamāṇasya ātmanā saṁyogas tattva-bubhutsā-viśiṣṭaḥ. sati hi tasmin indriya-artheṣu buddhayo na utpadyante tad-abhyāsa-vaśāt tattva-buddhir utpadyate.*
[17] *yoga-ābhyāsa-sāmartha.*
[18] Before Dharmakīrti, Dignāga explicitly claims that "the yogin's intuition of a thing in itself unassociated with the teacher's instruction" is a type of perception. Translation by Hattori (1968: 27). Patil (2009: 335) notes Ratnakīrti's position that "as a result of meditation, it is possible for us to directly 'see' the *dharma* itself, through a special kind of perception called 'yogic perception.'" Also see Woo 2003.

n. 23) notes that indeed, "all schools of Indian philosophy other than Mīmāṁsā and the materialist Cārvāka school accepted the possibility of a faculty of yogic perception."[19]

3.2 Nyāya and Yogic Experience of God

In the closing paragraphs of his famous *Nyāyakusumāñjali* (*Flower offering of Logic*), Udayana argues that yogic perception generates veridical cognition of *Īśvara*. The *Kusumāñjali* is a wide-ranging text, but firmly centered on rational theology. Having offered a number of arguments for God's existence and extensive defenses of the theistic position, Udayana concludes by arguing:

> The Lord who is thus established by sacred testimony and by inference is directly seen by some people, since he is an object of experience, like a pot.[20]

Udayana considers the objection that the causal conditions for such perception are unknown to us and therefore it should not be accepted as legitimate. In response, he argues that normal investigative procedure starts from the recognition of an effect, whose causal conditions are suggested (*vyañgya*) by its nature.[21] Taking for granted that such experiences are well attested, he suggests that they need to be explained according to the nature of the data.[22] This

[19] I think that the above statements by *Nyāya-vaiśeṣika* thinkers should illustrate how seriously they take yogic experience. This should refute the marginalization of Nyāya's concern for yogic perception by some modern scholars of Nyāya. Mohanty (1992: 241) has recently commented that yogic perception "serves no other purpose" for Nyāya than "securing and strengthening the basic realism of the ontology." Again, as will be seen, their treatment indeed involves more than that, and involves defense of belief in God, the eternal self, etc.

[20] *sa evaṁ bhagavān śrutaḥ anumitaśca. kecit sākṣāt api dṛśyate prameyatvādeḥ ghaṭavat.*

[21] This is in consonance with what I have called Nyāya's *particularism* about *pramāṇa* identification.

[22] To make room for an experience which is perceptual in nature but occurs without the operation of ordinary sense faculties, he considers dreams. Though they are indeed non-veridical, dreams are at least an instance of experience which is pseudo-perceptual in nature though not mediated by sense-

is important. Though Nyāya-Vaiśeṣika thinkers will try to defend yogic perception from challenges, they do think that again, the fact that such experiences are spoken of in both religious lore and occasional common experience will allow for it to have some kind of presumption of innocence (as will be discussed further below). Drawing on traditional accounts, Udayana suggests that the cause of yogic perception is a special kind of religious merit (*dharma*), born either of good works or yogic practice. He suggests two factors which make an experience a legitimate instance of yogic perception. It must be (i) produced by religious merit (*dharmaja*) and (ii) partake of phenomenal immediacy (*sākśāt-kāritva*). The first factor ensures a yogic cognition's veridicality. Vivid hallucinations and the like are not born of religious merit, are not veridical. The second allows it to come under the heading of *perception.*[23]

Udayana's comments, though brief, suggest a schema by which yogic perception may be construed as a *pramāṇa*. Before reconstructing it, it would be useful to remember the two criteria which cognition must meet to have high-grade positive epistemic status (*prāmāṇya*). First, and fundamentally, the objecthood (*viṣayatā*) of a cognition must hit the object targeted by the cognition such that presents the object as having a property it indeed has. This is a basic correspondence requirement (given qualifications regarding the notion of correspondence as discussed in the Chapter One). Second, the cognition must be causally connected with its object in the proper way. While epistemic luck may engender a veridical cognition that is *prāmāṇya* in the sense of veridical, it would not be *guṇa-pramāṇa-ja* in the sense of *pramāṇa* as a natural kind of knowledge-generator.

---

faculties. In principle, experience of a similar kind, but veridical, is possible for those who are not sleeping but rather absorbed in veridical yogic states.

[23] Udayana cites a number of texts from the Upaniṣads and the *Gītā* which enjoin that one should "see God" and offering paradigmatic descriptions of yogic practice. This underscores the notion advocated by Alston (1991) that these kinds of experiences take place within communities or traditions of doxastic practice, complete with paradigmatic descriptions of yogic experience and criteria of various sorts which help exclude pseudo-yogic perception.

The possibility of genuine yogic perception would require that a normally imperceptible object (in this context, God) be the intentional object of a cognition which grasps it veridically, and the mechanism by which it is produced must be analogous to the *pramāṇa* perception. What would be the mechanism governing such experience? Naiyāyikas clearly consider yogic experience perceptual (calling it *yogaja-pratyakṣa* and *yaugika-pratyakṣa*), though indeed, it is supposed to be a kind of non-ordinary perception, which fails to follow the standard causal process described in NS 1.1.4 and its commentaries. Most importantly, it does not require functioning of the external senses. Later Naiyāyikas include it in the class of *alaukika pratyakṣa*, non-ordinary perception.[24] There are various accounts of

---

[24] From early on, Nyāya recognizes certain kinds of extraordinary perception. While ordinary sense perception hinges on sense-object connection, in extraordinary perception, the object or property perceived is not directly connected to the sense faculty, but connected to it in a non-ordinary way. Later Nyāya (beginning at least with Jayanta) recognizes three kinds of extraordinary perception: (i) yogic perception, (ii) perception of a class through an individual which belongs to that class, and (iii) perception of the properties of a thing which are mediated by memory.

Potter (1977: 168) translates the second kind, *sāmānya-lakṣaṇa-pratyakṣa* as "perception of a universal characterizing all members of a class one of whose members is presented." Chatterjee (1978: 209) provides an explanation: *sāmānya-lakṣana-pratyakṣa* is the perception of a whole class of objects through the generic property (*sāmānya*) perceived in any individual member of that class." Nyāya holds that universals are experienced as instantiated in individuals (this is subsumed in one of the six kinds of connection provided by Uddyotakara, inherence in what inheres in what is conjoined, *saṁyukta-samaveta-samavāya*). But the notion that we may have apprehension of all of the individuals which instantiate a universal, *qua* their being instantiations of the universal, is further accepted in order to explain how we attain to knowledge of *vyāpti*, or universal concomitance, which undergirds inference. Nyāya reasons as follows: unless one's experience of some particular smoke instance as conjoined with a fire instance allows him to experience all instances of smoke *qua* smoke as being conjoined with all instances of fire *qua* fire, through the natural tie between the universals *smokiness* and *fieriness*, inductive extrapolation would be impossible. Nyāya thus solves the problem of induction by appeal to extraordinary perception. This does not imply that we are always able to recognize such vyāpti in every experience involving universals. It may take repeated experience for us to notice the ever-present connection. But when such recognition arises, it is due to perceptual experience, not a extrapolative projection of past experience. Chatterjee (1978: 209-218) provides the best attempt I have seen to defend the reasonableness of this admittedly strange notion.

The third kind of extraordinary perception, *jñāna-lakṣana-pratyakṣa*, involves the visual experience of unpresented properties of an object which is currently seen. Standard examples include seeing a piece of sandalwood as fragrant or seeing a piece of ice as cold. Here, there is sense-object connection, but some of the phenomenal features of the experience, while veridical, are not generated by such connection. They are rather mediated by memory. What distinguishes this kind of perception from inference is that the property in question is experienced with a phenomenal character lacking in inference. It would seem that what may be considered inference for some may take the form of perception for others, depending on familiarity with the conceptual connection between the properties

perception within Nyāya that may be appropriated for an account of yogic experience. In the *Tattvacintāmaṇi*, Gaṅgeśa endorses a number of definitions of perception. Two are most useful for our purposes: (i) perception is that mode of knowing which partakes of "phenomenal immediacy" (*sakśāt-kāritatva*), and (ii) a perceptual cognition is "a cognition which does not have another cognition as its chief instrumental cause" (*jñāna-akaraṇakaṁ jñānam*).[25] As before, an unstated presupposition is that such cognitions must veridical to be considered *pramāṇa*-produced. As such, vivid hallucinations, which may fit these criteria, are discounted.

These characterizations allow for two mutually supportive criteria for perception. From the subject's perspective, perception is distinguished by being strikingly vivid,[26] its content presented with profound immediacy; to borrow Pryor's phrase, it has phenomenal force unlike other means of knowing (or other propositional attitudes more generally). Commenting on NS 1.1.3, Vātsyāyana and Uddyotakara remark that knowledge born of perception tends to have a conclusive feel—it tends to end the need for inquiry, owing to such force. Similarly, Alston (1991: 36-7) stresses the *presentive* character of perception. "When I stand before my desk with my eyes closed and then open them, the most striking difference in my consciousness is that items that I was previously merely thinking about or remembering, if conscious of them in any way, are now *present* to me . . . they are *given* to

experienced directly and mediately. Again, Chaterjee (1978: 281-227) provides a thoughtful discussion and defense of this position.

[25] Phillips/Ramanuja Tatacharya 2004: 330, 334. Other texts provide similar characterizations. Bhāsarvajña defines perception as "that which is the cause of a correct, phenomenally immediate, awareness episode" (*saṁyag-aparokṣa-anubhava-sādhanaṁ pratyakṣam*). Annam Bhaṭṭa defines perception as "the cause of veridical cognitions with phenomenal immediacy" (*sākṣātkari-pramā-karaṇam pratyakṣam*).

[26] Indeed, this quality of immediacy is sometimes glossed as *being produced by the senses* (see *Tarkabhāṣā* 1953: 6). But it need not have such a narrow sense. Rather, *sākṣāt-kāritatva* may be read (and is best read) as an account of the phenomenology of perceptual experience, not the mechanism which produces it. Normally, the senses are the only kinds of things which produce such immediacy, but this is not an absolute rule. Udayana (Dravid 1996: 489) notes that dreams may partake of a similar immediacy without the functioning of the external senses.

my awareness . . .” In short, perception delivers information about the world in an immediate, compelling, forceful way. But more than this, in perception the belief or cognition generated is born of a direct awareness of the object. The force of such awareness helps provide prima-facie justification of beliefs which are formed on the basis of perceptual experience devoid of manifest defeaters.

From a third-person perspective, perception is characterized with another kind of immediacy: it does not have another cognition as the proximate causal factor in its production. [27] Perception takes in the world more directly than the other *pramāṇas*, which require other cognitions to trigger them. Inferential cognition, by way of contrast, is triggered by a prior cognition of a *pakṣa* (inferential subject) as qualified by a *hetu* (inferential mark). Testimonial cognition is the product of a prior perceptual cognition of sounds, gestures, or writing.[28]

> Regarding a cognition to which you yourself are in no doubt as to its being perceptual, the only account you can give is that it is a cognition independent of the recollection of the relation between the *hetu* and the *sādhya*, which directly apprehends its own object. (NV 3.1.1; slightly modified version of translation in Jhā 1984: 1078-9)

---

[27] I should underscore that the causal relation play here is a kind which is compatible with—indeed arguably identical with—what is generally called the *basing relation*. Regarding sense perception, it is the causation of output cognition by means of a process involving the operation of sense-faculties upon (normally) external objects. See Alston 2005: 84-5 for a brief defense of a causal account of the basing relation.

[28] Nyāya does accept that prior cognitions generally inform perception in that they help produce the conceptual framework within which perceptual cognition takes place. But such cognitions are not the proximate causes of perceptual cognition.

It seems that these two kinds of perceptual immediacy, phenomenal and causal, are deeply tied. Knowledge sources which require other cognitions as proximate causes, like testimony or inference, are also phenomenally removed from the content of the cognitions they produce. Testifiers with various body types and voices could produce the same bit of testimonial belief in a listener (as could written words in varied fonts). An inference to fire moves from a cognition about what is phenomenally present (smoke) to one about something phenomenally absent (fire), by means the recognition of a conceptual connection between smokiness and fieriness. Conversely, perception, whose primary causal factor is taken to be a connection (*sannikarṣa* or *pratyāsatti*) between one's perceptual faculty and an existing object, provides awareness of the object which is phenomenally immediate.

Focusing on this notion of immediacy, we have a first approximation of what underwrites the analogy between yogic experience and ordinary perceptual experience. From a first-person perspective, yogic experience strikes a subject with a certain force; it strikes one as veridical on the face of things, in a way that is analogous to an ordinary perception of, for example, a pen on one's desk. Moreover, the content of the belief directly follows from the phenomenally rich content of the state of awareness.[29] As noted in section 1.4, Nyāya holds that the putative deliverances of *pramāṇas* provide immediate certainty in the absence of known defeaters. This is particularly evident with perception. A definitive or certain cognition strikes one as true from its inception. The process which produces yogic-perceptual cognitions will also have an immediacy of its own in that the cognition it produces is held to arise from a kind of *direct* sensitivity to some fact or object. It is not

[29] James (1902: 371) similarly notes the "noetic quality" of religious experience. "Mystical states seem to those who experience them to be also states of knowledge . . . as a rule they carry with them a curious sense of authority for aftertime." And, "as a matter of psychological fact, mystical states of a well-pronounced and emphatic sort *are* usually authoritative over those who have them" (1902: 414). Stace (1960: 177) remarks that "mystics usually insist on the sense of certainty they feel that their experience has objective reference and brings them in contact with a reality outside themselves." Also see Alston 1991: 39ff.

triggered by another cognition to which it is inferentially linked as in the case of inference, or mediated by syntactic and semantic understanding as in the case of testimony. On this model, a cognition is a product of yogic perception if it satisfies the following criteria:

1. It is veridical. It is an appearance of an object as qualified by a property it indeed has. This is a condition on its being within the scope of *pramāṇa*-born cognitions. If this condition is not met, an experience may have the feel of yogic perception, but as it is not a genuine *pramāṇa*, but an *ābhāsa*, a semblance of such experience. It would be better characterized as a species of illusion or hallucination.
2. It partakes of compelling first-personal immediacy analogous to the kind with which ordinary perceptual experience strikes a subject. Of course, it may be stronger or more vivid than ordinary perceptual experience (and is often conceived of as such). This is a condition on its being perceptual.
3. It is not produced by the contact of sense faculty and object in the ordinary way. Corresponding to this, its putative object both transcends ordinary experience (and is commonly held to have some kind of deep metaphysical significance). This is a condition on its being "yogic."[30] Naiyāyikas sometimes speak of such perceptual states being mediated by the *manas* and the accumulation of great karmic merit.[31]
4. The mechanism which produces such experience involves a direct apprehension of objects without need for another cognition as a proximate cause. It is a reception of the

[30] Praśastapāda notes that what he calls *viyukta yogis*, or those who are not currently experiencing *samādhi*, are able to have yogic experience when spurred by sense experience. I'd like to keep this notion on the table insofar as some kinds of yogic experiences are held to involve the experience of apparently ordinary objects but in such a way that profounder realities are experienced *through* such objects. This case is still yogic in that something is given in experience beyond the mere content of non-yogic sense experience. In my "Indirect Perception of Brahman in the Bhagavad-gītā," not yet published, I provide an account of such kinds of religious experience in the *Bhagavad-gītā*.
[31] Viśvanātha's *Muktavali* v. 50, and VS 9.1.1.

object in question which is direct and to that degree analogous with sense perception. This is a condition on its being perceptual. (Again, my speculation is that criteria two and four have a deep tie).

With this model in place, I suggest that a Naiyāyika or allied defender of theism within the context of *pramāṇa* discourse may argue that insofar as ordinary perceptual states provide default positive epistemic status for perceptual beliefs, yogic perceptual states provide default positive epistemic status for beliefs regarding their putative objects including God.

In what is to me a remarkable passage, writing at a time when very few Western philosophers were aware of Indian philosophy, William Wainwright cites *pramāṇa* theory in support of his argument that mystical experience is cognitive. He praises the notion of intrinsic validity (which he calls "self-certification"), found in Advaita Vedānta, for the important truth it contains:

> If there is no type of apparent cognition that is presumptively valid, then it is impossible to avoid an infinite regress. Furthermore, to suppose that one type of apparent cognition is presumptively valid while another is not is arbitrary. It follows that any type of apparent cognition is presumptively valid, and should be accepted in the absence of adequate reasons for doubting its validity. (Wainwright 1981: 125-7)

I would argue that all of the above benefits of the "intrinsic veridicality" perspective are available to Nyāya's version of *pramāṇa* theory (without its flaws) in the form of a default presumption of innocence given to cognitions which are putatively veridical (see sections

1.3-4 and appendix A). And to the degree that yogic experience arises "as true," it has, as a subspecies of perception, the same default status.

3.3 Challenges and Responses

The following will be an exploration of challenges and defenses of the account of yogic perception. As previously, I will consider both historical arguments and those not articulated in the historical context but relevant to the debate. I will also not confine myself to historical responses, but, in the absence of treatment given in classical literature, will creatively consider responses available to Nyāya and those who have similar views.

1. *Yogic perception is a contradictory notion. Perception, by definition, is limited to objects within a certain range. Since the objects of so-called yogic perception fall outside of that range, it is not really perception, but something else, something which is not a* pramāṇa*.*

This is a reconstruction of an argument (or, more accurately, a group of arguments) offered by the great Mīmāṁsaka, Kumārila Bhaṭṭa, in the "Determination of Perception" chapter of his *Śloka-vārttika* (See Taber 2005: 152, 52-6).[32] My interpretation of Kumārila is that he forces the proponent of yogic perception into a dilemma. If yogic perception is actually *perceptual*, it must have the same limitations as ordinary perception: it is restricted to the present moment and may only apprehend the medium-sized dry goods of common

[32] Kumārila's overarching objective is to support the singular authority of the Veda to provide direction for religious conduct. Therefore he rejects the notion that yogins and sages have the ability to apprehend otherworldly realities, in particular the nature of *dharma*, religious merit, and the kinds of conduct which are religiously edifying. Many traditions, including the heterodox Buddhists and Jains, argue that their founders or reformers partook of a special, yogic insight by which they apprehended the fundamental nature of reality. Their followers appealed to such insight as the reason that Buddha, Mahāvīra, or other saints could prescribe religious or salvific conduct for their followers.

experience. If, on the other hand, yogic perception is taken to target events beyond ordinary perception, it should be classified as one of the familiar mental states which do so, like memory (which targets the past) or desire (which targets the future). In any case, so-called yogic perception would not be a *pramāṇa*. Yogic perception must therefore, be *either* perceptual or "yogic". If the first, it cannot grasp supersensibles. If the latter, it is not factive.[33]

Response: Jayanta cites Kumārila and directly responds to his challenge in his *Nyāya-mañjarī*.[34] Kumārila's argument, noted by Jayanta, may be summarized in the syllogism "yogic perception does not apprehend dharma, since it is perception, like our perception."[35] Jayanta responds by inquiring as to what Kumārila means by "yogic perception". If Kumārila uses this term to refer to perception as experienced in ordinary life, then indeed, no one claims that it has the capacity to apprehend dharma, and he need not spend such effort in trying to refute it. But if he is speaking of yogic perception as understood by Nyāya and others, Kumārila cannot employ it as a *pakṣa* in his argument unless he accepts that it is truly exists. In either case, his argument does not succeed.

The second lemma of Jayanta's rebuttal relies on classical requirements on term introduction (see section 2.2). As inference is meant to generate veridical cognition (that p is

[33] Kumārila does not explicitly structure his individual arguments as either an incoherence claim or a dilemma, but I think that that his overall argument is usefully reconstructed in such a way. He further argues against an appeal to a "common" kind of exceptional perceptual experience, intuition (*pratibhā*). *Pratibhā* involves immediate "feels" with propositional content, which are sometimes found to be veridical. Recognizing *pratibhā* as legitimate would expand the scope of perceptual experience such that yogic experience would more likely be admitted. Kumārila does not deny the data—cases of veridical *pratibhā* do arise, he notes. Still, he argues, it is not an independent *pramāṇa*, as evinced by the fact that people do not trust such intuitions in the absence of confirmatory cognitions produced by ordinary *pramāṇas*. Even when such intuitions arise, the real work is done by the confirmatory *pramāṇas* of the familiar types, and the intuition may be reduced to a mere accident of fate. See Taber 2004: 183 n. 26. Also see Sinha 1958: 335-6.
[34] The extended argument is found in Jayanta Bhaṭṭa (ed. Varadacarya) 1969: 259-280. English translation may be found in Jayanta Bhaṭṭa (trans. Bhattacharyya) 1978: 210-225.
[35] See Taber 2004: 52.

S), one cannot put forth a fictitious or dubious entity as one's *pakṣa* (p). An argument that does so is beset with the fault of *āśraya-asiddhi*, "unestablished locus". Inference is generally considered to rest on two kinds of awarenesses, which are fused in what is called *parāmarśa*, "subsumptive judgment": (i) The inferential subject is cognized as possessing the prover property (*hetu*), and (ii) the *hetu* property is remembered as being pervaded (*vyāpya*) by the probandum property (*sādhya*). *Asiddha* fallacies occur when there is a problem with the first putatively cognized fact, regarding the inferential subject's being qualified by the *hetu*.[36]

Jayanta argues that Kumārila's argument founders on this point. Kumārila is employing *yogic perception* as the inferential subject of his argument while contending that it does not exist. If, conversely, *yogic perception* is taken to denote something real, Kumārila's argument fails, since it is contradicted by the concession that yogic perception, as is commonly understood, exists. If *yogic perception* is non-referring, and no such thing exists, the argument fails due to the *āśraya-asiddhi,* having an unestablished locus. In the next chapter will find Udayana use the same strategy to reject certain formulations of anti-theistic argument.[37]

Jayanta's response is not compelling as it simply postpones his opponent's argument until it can be reformulated. Granted that debate should take place according to rules and that rules concerning term introduction are important for Nyāya, Jayanta's response still seems sophistical. Even if his response is reasonable according to classical cannons of inference, there is clearly philosophical bite to Kumārila's challenge. It requires a better answer.

---

[36] See *Tarka-bhāṣā* §53 (Iyer 1979: 96).
[37] This strategy naturally leads to the question of counterfactual hypotheticals and their use in reasoning. It seems that Jayanta's strategy would lead to the abolishment of such counterfactuals. In short, the Nyāya approach to counterfactuals, as noted by Udayana, is to ascribe a non-existent property to an existing object. See Dravid 1996: 220.

I think that a more compelling response by Jayanta is that perception need not be mediated by faculties of the kind with which we are commonly familiar.[38] In the context of a positive argument for yogic perception, he notes that some animals have perceptual capacities which are unavailable to human beings. While I think his positive argument fails, the consideration of animals' perceptual capacities provides a strategy for defense of yogic experience as perceptual.[39] Reflection upon various animals' sensory faculties including, for example, the echo-location deployed by bats or the ability of certain fish to "see" by means of sensitivity to electric discharge, expands the notion of perception beyond merely the cognitions produced by the sense faculties of ordinary human beings.[40] Given this, yogic perception should not be excluded from the category of perception because it does not rely on external senses (*bahir indriya*) as commonly understood. In yogic perception, experience partakes of phenomenal immediacy, as (we can imagine) do the non-normal perceptual states of the animals mentioned above, though it is not reducible to perception as commonly understood and experienced by ordinary human subjects. We could further imagine an alien race which has perceptual faculties completely unknown to us, and it seems rash to deny that they are incapable of perception (or something sufficiently analogous to deserve the title).

---

[38] After arguing that yogic experience may be mediated by sense-organs, he argues that it need not be, in any case, and may require only the *manas*. He also cites the phenomenon of *pratibhā*, intuitive "feels" as a non-sensory analogue of yogic perception. See Varadacarya, ed. 268-72 and translation in Bhattacharyya 216-19.

[39] Jayanta's positive argument appeals to the capacity of animals to perceive things that are imperceptible to ordinary humans. This indicates that there is a range of perceptual capacities amongst beings of various sorts. With echoes of Aquinas' Fourth Way, he claims that since there is such a range, there must be a superlative degree of perceptual power, and that that is what is meant by yogic perception. His argument fails because the superlative degree within a range need not be the highest degree imaginable (in this case, yogic perception is equated with omniscience). Classical critics of this argument offer the example of jumping. Though there is a *terminus ad quem* for the increasing range of human beings' capacity to jump, it is not the highest (logically or metaphysically) possible height. Jayanta considers this criticism, and retorts that the ability to know is not conditioned in the way that jumping is, and can thus range farther. While suggestive, I find his claim little better than stipulation and in need of further defense.

[40] Wickelgren (1996) notes that the "electric fish" use their "electric sense" to "detect the rough shape, conductivity, and location of nearby objects, to recognize members of their species, to call their mates, to find their position in a school, and to enact other behaviors critical to their survival.

The possibility of yogic perception may thus be defended by appeal to the varieties of perceptual states amongst animals and the possibility of alien perceptual states.[41]

I would like to underscore that this strategy involves a principled extension of knowledge sources, a recurrent feature of Nyāya arguments for God. In the case of yogic perception, Nyāya must expand the concept of perception while maintaining its basic integrity. The Mīmāṁsā opponents are, in comparison, conservative regarding the conceptual parameters of *pramāṇa* types. Nyāya's task is to provide an account of yogic experience which is similar enough to ordinary perception to be granted *pramāṇa* status, but different enough to account for the radical distinction between yogic states and ordinary perceptual states. The expansion must be principled, governed by acceptable considerations and apt analogies. Later we will see that Nyāya is similarly concerned with inferential extrapolation, and argues that inference has the ability to give us knowledge of wholly new kinds of things (in this case, God) by principled extrapolation from the data of ordinary experience.

Jayanta offers a further response to Kumārila's blanket denial of the possibility of yogic perception: the only way to deny categorically that yogic perception occurs is to have the ability to cognize the contents of everyone else's mind. But that would mean that you (the denier) have yogic perception! As such, blanket refusals for the possibility of yogic perception do not gain purchase.

[41] Śrīdhara considers a similar argument by an opponent of yogic perception: "yogis cannot perceive supersensuous things, because they are living beings, like ourselves" (trans. Jha: 1982: 415; also see the summary in Sinha 1958: 338). His response is that while commonly, indeed, living beings do not perceive supersensible things, there is nothing logically incompatible between being a living being and having the exhaustive awareness reputed to the yogis. Since the concomitance between being a living being and having absolute limitations on perceptual ability is at best doubtful, one cannot dismiss the reports of yogic experience apriori.

2. *Reputed instances of yogic experience suffer from a lack of inter-pramāṇic support and are therefore dubious*.

Arguing against the existence of God, Jayanta's interlocutor claims that no *pramāṇa* provides support to the theistic hypothesis.[42] Belief in God is not perceptually grounded, since (among other things) the reality of yogic experience is itself not established.[43] I'd like to expand upon this objection by considering the question of inter-*pramāṇic* support.[44]

Nyāya holds that in ordinary experience, the deliverances of each *pramāṇa* tend to concord with the deliverances of other *pramāṇas*. Though inter-*pramāṇic* support is not necessary for the default entitlement accorded to putatively veridical cognitions, it may be appealed to in response to reasonable doubt or challenge. Yogic perception seems, however, to be isolated from such mutual support in two ways. First, such experience would be restricted to a very small class of persons, those who have engaged in yogic disciplines or those few persons who profess such capacities or experiences without disciplined effort.[45] As such, members of the broader community have no way to verify the claims of yogins. Second, as yogic perception purportedly cognizes otherwise imperceptible objects, no other *pramāṇa* is fit to confirm the occurrence of such experience. The consequence of such isolation is that straightforward falsification or certification of putative yogic perception is difficult to achieve. Despite the intensity of an apparent yogic experience, its apparent

[42] *na hi tathāvidha-puruṣa-sadbhāve kiñcana pramāṇam asti* (Varadacarya 1969: 484).
[43] *yogīnām aprasiddhatvāt na tatpratyakṣa-gocaraḥ* (Varadacarya 1969: 484).
[44] Jayanta's interlocutor is a Mīmāṁsaka, who would hold the view that cognition does not need further confirmation to be justified, though later cognitions may serve to undermine it or call it into question. Still, he would hold that inter-*pramāṇic* incoherence is a key feature by which cognitions may be challenged. If such is unavailable to an entire type of cognitions, such a type may be dubious from the start. Unlike the impersonal Veda, which is "sealed off" from refutation through Mīmāṁsā hermeneutical strategies, yogic perception is grounded in individual people's experience and is therefore more dubious.
[45] See YS 4.1. James (1902) also mentions a number of such cases.

isolation from inter-*pramāṇic* support seems to make it akin to hallucinations which, despite their vividness or intensity, lack the potential for intersubjective confirmation which veridical cognitions possess.[46]

An allied way to frame the objection is that the "principled extension" spoken of above is illicit, for the following reason. Extension of a knowledge source is either the application of an accepted means of knowing into a new domain, or the subsumption of an apparently new knowledge source under the heading of an accepted means of knowledge. In the case of yogic experience, the extension involved is the latter. One way to construe what makes the extension of a knowledge source "principled" is that in such extension, there are no relevant disanalogies or vitiating conditions that beset the "extended" knowledge source while absent from the accepted source. Here, the apparent lack of inter-*pramāṇic* support may be construed as such a disanalogy or vitiating condition.[47]

Response: I think that a number of avenues are available to the Nyāya defender of yogic experience. (i) He may simply deny the claim that *inter-pramāṇic* support is not available. For example, Nyāya contends that the yogic experience of a non-material, enduring self (for instance) is supported by the deliverances of various *pramāṇas*.

> From verbal testimony (*āpta-upadeśa*) is ascertained that the self exists. The same is ascertained by inference (viz.): 'The probantia for the inference of the self are desire, aversion, motivation, pleasure, pain, and knowledge.' (The same is ascertained by) perception 'resulting from yogic meditation' (*yoga-*

[46] It is true that mass hallucinations are said to occasionally occur. Nevertheless, the very limited intersubjective support of such hallucinations is a key feature of their being rejected as non-veridical.
[47] An argument akin to that outlined above has been offered by Martin (1959). Various articulations of this kind of argument are discussed in Yandell (1993: Chapter 10).

samādhija). (Vātsyāyana: *NB* 1.1.10; trans. Gangopadhyaya 1982: 13)

Vātsyāyana claims that the three primary *pramāṇas* converge in support of the notion of a non-material self (see the discussion of *sāmānyato-dṛṣṭa* inference in 2.2). We have already noted that Udayana makes the same claim regarding God. This response directs the debate to the deliverances of natural theology and other *pramāṇas* to gauge whether they do provide such support. Moreover, regarding token-token *pramāṇic* support from the same *pramāṇa* type, classical sources contain numerous accounts of yogic and meditative experience which cohere with each other in a way that one would expect should they be experiences of genuine objects.

(ii) Independently of the first response, Nyāya may appeal to the nature of expert knowledge. Though Nyāya does not explicitly develop this kind of defense, the resources are readily available. Bhartṛhari (VP 1.35) explicitly compares yogic perception to "the knowledge of specialists as regards certain gems, silver coins, etc., *which is not conveyable to others* (*pareṣām asamākhyeyam*), comes about only through repeated practice, and is not inferential" (modified translation of Balcerowicz 2008: 317; italics are mine). Barring exceptional cases of savants, those who have not undergone requisite training have little access to expert knowledge except in the form of testimony. Moreover, the untrained are normally unable to test thoroughly the claims of experts. In ordinary life, the specialized claims of scientists are often unverifiable by those outside of the scientists' subfields. Ordinary people have little recourse but to take the diagnoses and prescriptions of doctors or

mechanics on their authority. Perhaps people can search for second opinions, but the reliance on authority persists.[48]

I think that Nyāya could argue that the community of yogis, or of yogis within a particular lineage of practice, could in principle constitute a tradition of experts who are qualified to gauge and critique the practices and claims of their fellow yogis and those of non-specialists who have claims to yogic experience. This would correspond in some measure to Alston's notion of a doxastic practice which is shared by an epistemic community. As a point of historical fact, meditational manuals and traditions of supposed expert practitioners are common in classical India. From the time of the Upaniṣads, individuals interested in meditation are advised to take up practice in a community and under the care of an expert teacher. Such traditions put forth guidelines to discriminate between successful and unsuccessful practice and veridical and non-veridical yogic experiences. As noted above, *Nyāya-sūtra* 4.2.46 advocates that a student who is ready for meditational practice should follow the various prescriptions of the authoritative texts on yoga. Given the existence of such communities, yogic perception need not be dismissed out of hand as unavoidably subjective and unverifiable.[49]

(iii) Beyond this, there are other, more general criteria which may be marshaled to assess the veridicality of claims of yogic experience. Indian texts which champion yoga practice usually provide descriptions of the virtues and qualities which successful yogis develop.[50] Such descriptions are thought to provide public, identifiable criteria which may be considered in order to judge whether a person's reputed yogic experience is genuine. This

---

[48] Excepting the reliance of other authorities to gauge the status of the expert in question, one could test an authority in the expert by examining its prescriptions over a long-term trial. This would require provisionally accepting the expert's status as a guide to action.
[49] See Wainwright 1981: 84ff for examples of such criteria developed by (mainly) Catholic sources.
[50] The *Bhagavad-gītā* offers a handful of passages meant for this purpose (e.g. 2.54-72; 14.22-5). Thanks to Edwin Bryant for reminding me about this.

approach is broadly consistent with Nyāya's appeal to success in action as an indicator of veridicality. If indeed certain attitudes like dispassion, selflessness, and charity, are commonly thought to accompany closeness with God or some kind of enlightenment, then, if a person is successful in developing the virtues of a saint, her claims to have had a powerful, immediate experience of God or some kind of transcendent reality are more credible than those who are not transformed in such a way. For example, the poet-theologian Rūpa Goswami has argued that genuine religious consciousness (*bhāva*) is evinced by a positive transformation of one's character. (*Bhaktirasāmṛta-sindhu* 1.3.25ff; Haberman 2003: 102ff).[51]

(iv) The challenge may be construed as the claim that yogic experience, taken as a *type* (as opposed to token instances of yogic experience) requires defense and support by wholly independent methods of verification before it can be accepted as a *pramāṇa.* It would seem that this is the specific concern of Jayanta's opponent who claims that it is unestablished and therefore unable to support theistic belief.

In response, Nyāya may appeal to an analogy with the trust granted to ordinary sense perception. To explain: one way to frame the opponent's challenge is that yogic experience's status as a knowledge source must be supported by independent checks of various sorts to be considered acceptable. We must bracket off all evidence which presupposes the kinds of things which depend on yogic experience for their evidential status. Then we reflect on

[51] In this regard James cites the reflections of St. Theresa of Avila:

> Like imperfect sleep which, instead of giving more strength to the head, doth but leave it the more exhausted, the result of mere operations of the imagination is but to weaken the soul. Instead of nourishment and energy she reaps only lassitude and disgust: whereas a genuine heavenly vision yields to her a harvest of ineffable spiritual riches, and an admirable renewal of bodily strength. I alleged these reasons to those who so often accused my visions of being the work of the enemy of mankind and the sport of my imagination. . . I showed them the jewels which the divine hand had left with me: they were my actual dispositions. All those who knew me saw that I was changed; my confessor bore witness to this fact. (1902: 22)

whether yogic experience is a legitimate *pramāṇa* type. If we deem it such, we then accept it. Since, the opponent contends, this will not happen, yogic experience is not a source of knowledge. Kumārila's argument against intuition (*pratibhā*, seen above) relies on such considerations.

By classifying yogic experience as perceptual according the schema given above, and given Nyāya's vigorous defense of default trust placed in putative *pramāṇas*, Nyāya has recourse to a powerful line of argument developed by Wainwright (1981) and Alston (1991). In short, the defense is an argument by parity of reasoning: the same apparent problem for yogic experience besets ordinary sense perception when taken as a type. Clearly we do not want to jettison the epistemic value of sense perception because there is no wholly non-circular way of demonstrating its veracity. Therefore, it should not be a problem for yogic experience either. Alston (1991: 103) argues that "none of the attempts to show that sense perception is a reliable source of belief, at least none that are not otherwise discredited, escape what I call 'epistemic circularity.' This suggests that, contrary to the usual supposition, the epistemic credentials of sense-perceptual beliefs are not so different from those of [mystical] beliefs." Wainwright anticipates Alston's approach.

> It is not clear that [the challenger's] demand is reasonable. Suppose that we were asked to justify the claim that sense experiences involve an awareness of something distinct from those experiences, viz. physical objects. It is not clear that we would know how to satisfy this request. In particular, it should be noticed that we cannot independently (of those experiences) establish the existence of physical objects and the occurrence of sense experiences, and observe that the two are correlated . . . In short, while the connection between mystical experiences and a transcendental object cannot be justified in the

> manner which Schmidt demands, the connection between sense experiences and physical objects cannot be justified in that manner either. (1981: 105).

This defense may be cast as a *modus-tollens* argument against the challenger's claim.

1. To be established as legitimate, a *pramāṇa* type must be supported by wholly independent checks (This is the general form of the argument against yogic perception.)
2. Sense perception, as a type, cannot be confirmed by wholly independent checks.
3. Therefore, sense perception is not epistemically valuable.

Since the conclusion is to be rejected on the grounds that it entails an unwarranted radical skepticism and since premise 2 is true, premise 1 must be rejected.

I should reiterate that Nyāya does not accept the claim that yogic perceptions are only supported by other yogic perceptions. They contend that the objects of yogic experience are confirmed by other *pramāṇas*. But the foregoing argument conceded the point in order to rebut the conception which motivates the current challenge.

3. *Appeals to yogic perception which argue for a God-like entity of some kind are blocked in advance, since they purport to establish something which is already discounted by the firm deliverances of other* pramāṇas.

Claims that a thesis is "blocked" are commonly used to rebut inferences. An inference whose probandum (*sādhya*) is rebutted by appeal to contradictory reports of other secure *pramāṇas* is *bādhya*, blocked, or patently false. In perceptual cases this happens as well. I tell my wife

that I saw a friend in the distance at the park, and she rebuts my claim on the testimony of our friend's mother, who says that he is out of town. At this stage, we must examine which of the two *pramāṇas* is stronger in this case and why. If the testimony is deemed stronger, it defeats my perceptual evidence. Or, if they are roughly equal, they both may be thrown into doubt. In effect, this objection amounts to an appeal to negative coherence:[52] whatever the source of the claim that God exists, the accumulated weight of other *pramāṇas* militate against it and so it must be rejected. Indeed, such negative coherence is normally what supports a strong default presumption against perceptual claims involving extraordinary things like ghosts or aliens. We may note that Jayanta's claim that one needs to be a yogin herself in order to categorically reject yogic perception fails to consider arguments of this type.

It seems that the considerations behind this objection influence much anti-theistic argument, classical and contemporary. That which runs counter to the deliverances of our knowledge sources or does not fit with the best-supported theories is commonly ruled out in advance.[53] In the contemporary debate various considerations may be appealed to in order to cast severe doubt on the theistic hypothesis *ab initio*: an appeal to the history of scientific advancement's replacing the old mythologies; the success of the physicalist paradigm; the results of historical scrutiny given to religious traditions; or reflection upon what are taken to be the pernicious social and individual effects of religious belief. In light of these, the reality of a supernatural being which corresponds to the traditional accounts is held to be untenable. While the Indian anti-theists do not appeal to the success of science or of the physicalist

---

[52] By negative coherence, I mean the relation that holds between a bit of information or a belief that does not cohere well with one's web of beliefs. One way to cache this out is probabilistically. The information is rendered improbable by our set of beliefs, and therefore is dubious even without an extensive examination of the evidence for it.

[53] The stock Nyāya example regards the claim "Fire is cold." Such a claim is defeated from the outset, unless remarkable evidence arises which warrants deep changes in accepted beliefs.

paradigm associated with science, they do claim that reports of legitimate *pramāṇas*—particularly inference—run counter to the existence of God, as will be discussed further in Chapter Four.

Response: We may note that negative coherence is a delicate tool in matters epistemological. It seems an inevitable part of any standard doxastic practice, as a time-and-energy saving approach to the adjudication of competing claims. We simply don't have the resources to reexamine our entire web of beliefs each time contradictory information arises, and therefore such information has a large burden of proof. Sometimes it will be ruled out in advance. Nyāya itself endorses such a picture of things in its deployment of *tarka* (and it is further illustrated in the concept of *siddhānta*, or well-established tenets of their system). To adapt an old adage, however, one person's negative coherence is another's dogmatic dismissal of evidence. The line is often difficult to draw.

Above, I have noted that contrary to the challenger's claim Nyāya and others have contended that the *pramāṇas* converge in support of theism. Besides this, in the Fourth Chapter of the *Nyāyakusumāñjali*, Udayana has labored to argue that none of the *pramāṇas* has the ability to rule God out in advance. We must defer a treatment of his arguments to the next chapter, since the primary arena for the adjudication of this challenge is rational theology. The most sophisticated Indian anti-theists focus on what they consider to be decisive arguments against God's existence, and Naiyāyikas endeavor to defeat such arguments.[54]

---

[54] We may note that that ancient Cārvākas also provide proto-Nietzschean arguments (or better, Nietzschean counterclaims) which indict the Brahmin priesthood for creating religious systems to allow themselves a steady livelihood as ritual experts. See Mādhavācarya (2002: 17-20).

4. Deep disagreement between various accounts of reputed yogic experience undermines its status as a putative pramāṇa*.*

The roots of this style of objection in Western thought reach at least as far back as Xenophanes (6th-5th Century BCE), who famously notes that members of different communities conceive of the gods in contrary ways. Clearly, members of different religious or cultural traditions conceive of their worshipable deities and spiritual landscape in different ways. This is incontrovertible data. If, therefore, two disparate traditions support their belief in the deity(-ies) of their tradition by appeal to religious or yogic experience, and the deities in question are incompatible, unless there are clear, objective criteria by which one report may be discredited, the general validity of yogic experience as such is severely discredited.[55]

Indeed, in classical India, there are apparent conflicts. Consider the personal, theistic conception of Brahman vs. that of Brahman as the impersonal ground of being. Both are reported as objects of experience within the Upaniṣads and Vedāntic literature. And among the theists? Is the supreme being Shiva? Krishna? The goddess Devī?

Response: there are a number of ways that Nyāya defenders of yogic experience may respond to this charge. I will only consider the most prominent. A common argument, found in the work of modern neo-Vedāntins and advocates of the *philosophia perennis*, is an appeal to a core of religious or yogic experience which is taken to be its essence and is attested to within diverse traditions.[56] This conception rejects the notion that *genuine* yogic experiences

---

[55] Alston (1991:255) considers this "the most difficult problem" for his defense of Christian mystical practice as a legitimate source of knowledge.

[56] Otto 1923 and Huxley 1944 stand as two of the most influential expressions of what I call *perennialism*.

conflict, by claiming that they indeed apprehend the same reality. In the introduction to his study of world mysticism, Walter Stace claims that

> The most important, the central characteristic in which *fully developed* mystical experiences agree, and which in the last analysis is definitive of the them and serves to mark them off from other kinds of experiences, is that they involve the apprehension of *an ultimate nonsensous unity in all things*, a oneness or a One to which neither the senses nor the reason can penetrate. In other words, it entirely transcends our sensory-intellectual consciousness. (Stace 1960: 14-15)

This core experience, it is then argued, is universal, and transcends human conceptual capacities such that it is amenable to appropriation by various traditions.

> Although the cognitive core of mystical experience, the undifferentiated unity, is basically the same all over the world, there are two factors which vary from culture to culture and give rise to the different cultural types of mysticism. These two variable factors are (a) the intellectual interpretation of the experience, and (b) the emotional tone with which it is accompanied. (Stace 1960: 130)

Indeed, Stace does a fairly persuasive job of unearthing parallels in accounts of mystical experience amongst various traditions. But there are problems with his restrictive definition

of mystical experience and the theory-laden character of his interpretive strategy.[57] Similar problems beset the work of neo-Vedāntins like Swami Vivekānanda whose attempts at synthesis are guided by a radical, uncompromising monism.[58]

Reservations about *perennialism* aside, the notion that there is a common core to religious sentiment/experience, and that even if the content or phenomenology of various kinds of religious experience are somewhat different from each other, they at least aim at the same transcendent object(s), is not uncommon in Indic thought. It may provide some materials for a "nuanced core view" defense of yogic experience. On this view, one may note

---

[57] A general methodological concern: Stace begins by claiming that the data indicates that the core of all *mature* mystical experience, regardless of tradition or cultural trappings, is the obliteration of subject/object duality and loss of self. But repeatedly, he explains away mystics' claims of a distinction between themselves and God. For example, while discussing Jan von Ruysbroeck, he claims that:

> If we were to accept Ruysbroeck's statement at its face value, we should have to hold that sometimes he experienced ("felt" is his own word) a duality between the soul and God and sometimes a pantheistic unity. . .Ruysbroeck's interpretation of this curious situation seems to be that the dualism is the truth but that the spirit becomes deluded by love into not noticing the difference between itself and God. This is very difficult to swallow. It seems to depend on the metaphor of being burned up. It seems much more likely that Ruysbroeck is reading the doctrine of the Church into his own experience. The true explanation would seem to be that when the experience is complete and perfect there is not distinction between subject and object, but that it is possible to stop at a stage at which the experience still takes notice of *himself* as an individual and has not achieved complete union. *This is the only hypothesis which, accepting Ruysbroeck's introspective account of what he felt as truthful, is still consistent with the hypothesis that the introspective experience is basically the same in different cultures though it is interpreted differently.* (Stace 1960: 161, emphasis mine)

This is an example of a fairly common interpretive pattern amongst those we may call *perennialists*, and one which makes me a little dubious about some of their broad claims. That said, the genuine experiential commonalities which they have unearthed is quite remarkable and provides some support to their claim that there is something common which is at the core of *much* (not all) religious experience.

[58] Yandell (1993:184-192) provides a sustained argument against the view that there may be such things as "pure experiences" which lack both content and phenomenology. This is advanced against positions that, like the perrenialists, seek to reduce all religious experience into one type which is overlaid by various concepts that are tradition-specific. While I think that his argument is strong, I think that some of the perrenailists may have recourse to argue that the experience in question are not contentless, but have a kind of minimal content involving things like a feeling of oneness, incredible peace, etc. Of course, at this point, my concerns about their denial/radical reinterpretation of contrary data would still militate against their position, since clearly many reports of religious experience speak of other kinds of content.

a handful of particularly important qualities which are commonly predicated of God as experienced in yogic perception, and allow for some variation amongst other qualities according to the dominant metaphors and conceptual frameworks of various traditions.

We have seen that Udayana begins the *Nyāyakusumāñjalī*, with an appeal to the ubiquity of theistic belief, suggesting that most everyone, irrespective of sectarian affiliation, has a core belief in the deity (Dravid 1996: 3-6).[59] This approach meshes well with what I consider Nyāya's baseline theism. Irrespective of the particular traditions to which Naiyāyikas adhere,[60] their arguments purport to establish a fairly generic creator God with certain features like omniscience, omnipotence and eternality. This baseline theism may be appropriated by theists of different stripes, and may serve as a point of commonality amongst them in regard to shared religious experience.

Theistic Vedāntins tend to develop theologies which recognize the legitimacy of variegated kinds of religious experience, noting that they often converge to an important degree, while privileging their own particular worship tradition. For example, a number of passages from the *Bhagavad-gītā* claim that that worshippers of other divinities actually worship Krishna but in an indirect way (Gītā 4.11, 7.20-3; 9.20-5). Theistic Vedāntins cite such texts in support of a core theistic view, where a single personal divinity reciprocates with various kinds of worshipers, even those who do not approach him directly.[61] They aim to account for both personal and non-personal experiences of Brahman, and various accounts of the personal feature of God, by sophisticated theologies which connect the nature of a spiritual practice or community with the nature of resultant experiences. It is typical of Tantra and other Indic traditions to view each type of genuine religious experience as truth-

[59] Later, in the Fifth Chapter of NKM, he argues that God is spoken of "under some name or other" in all the Vedic traditions.
[60] Generally, Nyāya philosophers have had much affinity to Śaivite and Paśupāta traditions. See Potter 1977: 21-23.
[61] E.g., Rāmānuja's commentary on Gītā 9.23.

hitting, but distinct and progressive, as the yogi matures in his or her spiritual evolution. Thus, most traditions accept the authenticity of others' experiences, generally speaking; the loci of disagreements are the schema and hierarchies within which such experiences are situated.

Some of the most interesting philosophical debates between theistic Vedāntins and the more radically monistic Advaita Vedāntins concern the conceptual framework by which various kinds of religious experience may be coherently placed and ordered in relation to what is thought to be the most complete conception of God.[62] Each side argues that their schema provides a lucid account of the metaphysical underpinnings of various kinds of religious discipline and experience and various scriptural statements about the nature of the divine while supporting the supremacy of either the personal God or the undifferentiated ground of being. Taking our start from some of the strategies mentioned above, it would not be impossible, I think, to craft a nuanced core view with enough internal richness and coherence to allow for a variety of experiences to converge toward a fairly general notion of God.[63] This is a task of constructive theology and outside my purview. Even if such attempts take place within a single doxastic community, as with Udayana or Rāmānuja, there are trans-cultural considerations which may be appealed to in the attempt to identify a core shared experience.

3.4 Assessment

---

[62] See Lott 1980: 3.

[63] Compare Yandell (1993: 267): "There seems in fact (and perhaps surprisingly) to be considerable agreement in such descriptions of numinous experiences, once one allows that different metaphors, similes, symbols, and even literal ascriptions may vary greatly from one culture to another while predicating roughly the same sort of characteristics."

In the absence of a conclusive appeal to negative coherence (or something more difficult, a definitive refutation of the theistic position), a Naiyāyika can, I suggest, successfully defend the putative *pramāṇa*-hood of yogic experience. Thus, one is within the boundaries of subjective rationality when taking her own yogic experience as veridical in the absence of known defeaters, given the analogy between ordinary perception and yogic perception. The same holds for her trusting yogic testimony of someone else whose testimony is not beset by defeaters (though, admittedly, the stranger the claims, the higher the credentials which are required for such a speaker).

The utility of this defense is however, quite limited. Those who accept the existence of *Īśvara* or Brahman, and who have some sympathy with the notion of yogic experience as informative may take refuge of the Nyāya position in response to the challenge that such belief is unfounded or lacking support. And those who are at least sympathetic to *īśvara* or Brahman may find claims to yogic experience provide extra support. But the strength of the defense of yogic perception has limited power to convince members of doxastic communities whose perspective is already anti-theistic, since they generally consider themselves to be in possession of various defeaters whose evidential status is stronger than the testimony provided by yogis. The reality of this limitation is supported by the fact that Nyāya rarely cites yogic experience of God in adversarial contexts. That *Īśvara* is graspable by yogic perception is directly claimed by Udayana (and implied by statements like those of Viśvanātha to the effect that yogis in *samādhi* have cognition which ranges over all knowable things).[64] And given the positive attitude toward yogic experience of Brahman expressed in the Upaniṣads, which Nyāya accepts as sacred testimony, Naiyāyikas clearly accept that it is possible. Still, as Champarathy (1972: 137) notes in his discussion of

[64] Viśvanātha 1991: 261. I am grateful to Professor K. K. Chakrabarti for directing me to this reference.

Udayana, "since the last type of cognition of *Īśvara* [that which is born of yogic experience] is a personal experience limited only to a privileged few, our author does not propose it to his adversaries as an argument for his existence." Likewise, Jayanta notes that Mīmāṁsā opponents reject yogic experience as evidence for God's existence, but does not try to rebut them. He simply cedes the point in order to focus on the inferential justification for God.

The upshot is that a Naiyāyika (or allied) defender of yogic experience may be rational by her own lights and may be free of fault by her community's standards for the acceptability of the deliverances of a putative *pramāṇa*. But unless she is able to convince an opponent that his own tradition's doxastic practices are superior, yogic testimony will likely not be probative for the other party. It seems that reasons like this, coupled with Nyāya's championing of rational theology, lead it to avoid arguing for *Īśvara* by appeal to yogic perception.

Chapter 4: Inferential Knowledge of *Īśvara*

4.0 Indian Rational Theology

In Indian thought, rational arguments for God's existence have largely been the province of Nyāya philosophers. This chapter will focus upon their work. As there are a few studies which attempt to trace the threads of Nyāya debate with their opponents on this issue,[1] my intention is not to record a blow-by-blow account of the development of each side. Rather, after considering examples of some of the key formulations of the argument and those of Nyāya's opponents, I will provide analysis and criticism. Our discussion will again be framed according to *pramāṇa* theory: is the Nyāya inference to God a legitimate *pramāṇa* token, or a product of a *hetv-ābhāsa*, a pseudo-reason?

Before embarking, I'd like to mention a little of the history of natural theology outside of Nyāya, in order to provide context. Though theistic speculations surface in the early Vedic and Upaniṣadic literature, this section will focus on rational theology as practiced within the "scholastic" traditions (from roughly the turn of the Common Era to around 1500 CE).

Yoga: The Yoga school endorses the view that regarding ultimate reality, yogic experience is the highest *pramāṇa* (YS 1.49 and commentaries). Nevertheless, Vyāsa (c. 400), the earliest commentator on the *Yoga-sūtra* (c. 200 CE), argues for *Īśvara's* existence. Commenting on YS 1.25, he notes that knowledge, like other personal attributes, comes in degrees. As such, he contends, there must be a most complete instance of knowledge. The being in whom the highest degree of knowledge, omniscience (*sarvajñatva*), is instantiated is

[1] See e.g., Bhattacaryya 1961, Chemparathy 1972, Vattanky 1984, Jackson 1986, Hayes 1988, Brown 2008, and Patil 2009.

Īśvara.[2] Vyāsa concludes that natural theology provides minimal information about such a being. For more, one must look to scripture.[3]

Vedānta: The constitutive concern of Vedānta is the interpretation of Upaniṣadic texts and a corresponding articulation of a coherent, Brahman-centered metaphysics. Vedāntins are committed to the status of Brahman as the fundamental reality which pervades, supports and directs the world. This is paradigmatically declared in the earliest extant systematization of the Upaniṣads, the *Vedānta-sūtra* (1.1.2), *janmādy asya yataḥ*: "Brahman is that from which the creation of the world, etc. springs."

The initial aphorisms of the *Vedānta-sūtra* center on the nature of Brahman, and commentaries on *sūtra* 1.1.5 (*īkṣater na aśabdam*) commonly take it to rebut the Sāṁkhya claim that insentient primal matter (*pradhāna*) is the efficient cause of the world. Sāṁkhya contends that primal matter unfolds teleologically.[4] The term *īkṣateḥ*, "on account of thinking," in *Vedānta-sūtra* 1.1.5 is commonly taken as a rebuttal: as creation is governed by teleology, the cause of the universe must be sentient. Rāmānuja (following Śaṅkara) comments that "the term 'thinking' may only be applied to a conscious subject and not insentient *pradhāna*." As his proof-text, he cites *Chāndogya Upaniṣad* 6.2.3 which characterizes creation as flowing from Brahman's thought: "Let me become many, let me expand myself." Rāmānuja notes further that "in all texts which speak of creation, the act of creation is preceded by thought." Rāmānuja's commentary provides something akin to a teleological argument insofar as it claims the dependence of creation on the existence of a volitional creator.

---

[2] Problems with this style of argument were discussed in Chapter Three in regards to Jayanta's argument in support of the legitimacy of yogic experience.

[3] As will be further discussed below, the Yoga school had much influence on early Nyāya attitudes toward contemplative practice and the notion of God. See Bulcke 1968: 19-27. Balcerowicz (2008: 335-343) discusses the influence of Śaiva/ Paśupāta rational theology upon Nyāya-Vaiśeṣika.

[4] See, e.g., *Sāṁkhya-kārikā* 17 and 9.

In another instance, while commenting on *Vedānta-sūtra* 2.2.18, Śaṅkara argues that the Buddhist notion of creation is untenable. Since the constituents of the world are themselves insentient (*acetana*), they could not come together to form the structured world of common experience without an overseeing creator (a creator denied by classical Buddhists). He appeals to the contrapositive of the *creation* → *sentient creator* inference championed by Nyāya.

Though the above illustrates Vedāntic appeals to design, Vedāntins do not give such arguments the status of independent proof. They are consistently relegated to a supporting role, at best helping elucidate what is already given in scripture. As Vedāntins hold that Upaniṣadic revelation is the only genuine source of knowledge of Brahman, they tend to disparage attempts to know of God by *pramāṇas* other than sacred testimony.[5]

A note on the structure of the rest of this chapter: Section 4.1 provides a reconstruction of Nyāya's most important argument for God. 4.2 catalogs important objections from various opponents and Nyāya's responses to such objections. 4.3 is an evaluation of the strength of Nyāya's argument and includes additional citations of key passages in support of interpretations given.

4.1 Rational Theology in Nyāya

As noted above, it is inference which Nyāya chooses as the *pramāṇa par excellence* for establishing God's existence. This is tellingly evinced by a passage in Udayana's

[5] See Rāmānuja's comments on *Vedānta-sūtra* 1.1.3-4 and Śaṅkara's comments on 1.1.2, 2.2.1, and 2.2.11. A possible exception to this trend is the *Iśvārasiddhi*, a partially extant work by the Śrī Vaiṣnava pioneer Yāmunācarya (916-1036 CE). On the surface, the text seems to endorse a Nyāya-like inference for the existence of God. Narasimhacary (1998: 219) argues against this reading of the text, claiming that the extant portions of the text merely outline a contemporary Mīmāṁsā-Nyāya debate.

Ātmatattvaviveka (*Discrimination of the Truth of the Self*). In the last chapter of the work, Udayana considers the grounds for scriptural authority.

> Wherefrom does scripture derive its authoritativeness? From its being asserted by a reliable speaker. But isn't that fact unestablished? No. The existence of a creator of the universe [who is also the author of the Veda] is established by inference (*anumāna*): the universe, whose status of having a maker is disputed, does have a maker, since it is a product. (Dravid 1995: 380)

Udayana avoids a celebrated example of circular reasoning, "I believe in God because of the testimony of scripture, and I trust scripture because God authored it." Since knowledge of God by God-authored sacred testimonial evidence alone would be circular and direct experience of God is at best rare and controversial as a means to convince others, Nyāya holds that God's existence is best established through inference.[6] The passage from Udayana also features an instance of the most elaborated Nyāya argument, from *kāryatva*, the "producthood" of things like the earth, which will be the main inference we discuss in this chapter. Much of the history of Nyāya theism consists of various refinements of this argument.[7]

We examined the basic elements of inference in Chapter Two and I do not intend to review them here. Nevertheless, I'd like to underscore a few considerations concerning

---

[6] I should note that this is not the only way that Nyāya grounds scriptural authority. Another argument, given by Jayanta, holds that since the information provided by scripture regarding matters of perceptible knowledge is very effective, it is entirely reasonable to trust it regarding matters which lie beyond ordinary perception. Udayana provides other grounds as well, some of which will be discussed in Chapter 5 of this dissertation. Still, the above quotation illustrates the high degree to which Nyāya esteems the inferential defense of God's existence.

[7] This is brought out well in Vattanky 1984.

inference which are relevant to the contents of this chapter. First, inference moves from a sign or inferential mark (*hetu*) or "prover" to a property with which it is invariably correlated. Therefore, it is incumbent for Naiyāyikas to demonstrate that the subject (*pakṣa*) of the proof for God's existence, normally including things like the earth or organic bodies, in fact exhibits the prover property in question, *producthood*. In Western parlance, it must be shown to exhibit the marks of design. Second, in cases of inference-for-another (*para-artha-anumāna*), it is mandatory that the person proffering an argument cite an example of inductive support (*dṛṣṭānta*) which is accepted by both parties to possess both the prover and probandum properties. In arguments for a unique entity like God, involving a special event—the creation of the universe—such examples become hotly contested and (like some of their modern descendents), the Indian opponents of the design inference often argue that no such example suffices. What is particularly interesting epistemologically are the claims that the Nyāya proof does not merely fail to convince, but rather, it fails in principle, due to the impossibility of inferring a unique kind of being from the inductive generalizations of common experience. The scope of general-to-particular inductive reasoning thus becomes a central concern. Nyāya will respond by claiming that standard principles of inference do allow for this. In fact, it claims, we make similar inferential extrapolations all the time.

The *Nyāya-sūtra* itself refers to *Īśvara,* though it offers no explicit argument for his existence. Sūtras 4.1.19-21 discuss the relation between human freedom, karma, and the sovereignty of God. They seem to argue that human *karma* only fructifies when activated by God, though the import of the *sūtras* is deeply contested.[8] Some scholars argue that the *sūtras* are in fact proffering an anti-theistic argument. In any event, Nyāya's explicit endorsement of theism stems from the earliest of known commentators, and ensuing

[8] See Bulcke 1968: 27-35 and Vattanky 1984: 4-11. Phillips 1995: 67 provides a succinct summary of scholarly debate over the interpretation of the *sūtras*.

generations of commentators would affix their arguments for *Īśvara* to this section of the text. The most enduring and developed argument for God's existence was framed by Uddyotakara, who argues for *Īśvara* as an original efficient cause (*nimitta kāraṇa*) of the universe.

1. Primordial matter, atoms and *karma* (*pradhāna*-*paramāṇu*-*karmāni*) function as guided by a being possessed of intelligence (*buddhimat*-*kāraṇa*-*adhiṣṭāni*)
2. because they are insentient (*acetaṇatvāt*)
3. like an axe.
4. As things like axes, due to insentience, operate only when directed by a conscious agent, so too do insentient things like primordial nature, atoms and *karma.*
5. Therefore, they too are directed by a cause possessed of intelligence (*buddhimat*-*kāraṇa*-*adhiṣṭitāni*) (NV 4.1.21; ND 945).

Uddyotakara provides three formulations of the argument in his commentary. All share a similar theme and style. Toward the end, he notes they share a similar feature in that they appeal to the notion of being an effect, or producthood (*kāryatva*).[9]

Though later Naiyāyikas would modify Uddyotakara's formula, the basic import remains the same. So Vācaspati:

1. The things which are the subject of disputation, like bodies, trees, mountains, and the ocean, have a maker who is conscious of their material causes (*upādāna*)

[9] Jacobi claims that the sentence mentioning *kāryatva* in Uddyotakara's commentary is an interpolation. Vattanky, however, provides good reasons to think it legitimate. See Vattanky 1984: 24n1.

2. since they are produced (*utpattimattvāt*), or since their material causes are insentient (*acetana-upādānatvāt*).[10]
3. Whatever is produced or whatever's material causes are insentient—they are all produced by a maker who is conscious of their material cause, like a palace.
4. The things which are the subject of disputation, like bodies, trees, mountains, and the ocean are such. [That is, they are produced and have insentient material causes].
5. Therefore, they are also thus [produced by a maker who is conscious of their material cause]. (NVT 4.1.21; ND 953).

And Udayana:

> Things like the earth have a maker as their cause, because they are qualified by the property of producthood (*kṣitādi kartṛ-pūrvakam kāryatvāt*) (NKM, Dravid 1996: 369).[11]

I interpret the argument from producthood, the *kāryatva* argument, as an argument from design, agreeing with Jackson (1986: 340-1). Some have framed it as a cosmological argument. Arindam Chakrabarti (1989: 22) suggests that it is a "causal argument with *cosmological, moral,* and *teleological* variants," but concludes that it is "the Nyāya version of the cosmological argument for the existence of God." Potter (1977: 102) splits the middle, calling it a "cosmoteleological" argument, and Patil (2009: 57-9) provides rationale for such hybrid nomenclature. Gopikamohan Bhattacaryya (1961: 88, 43) uses both appellations

[10] By employing two separate *hetus* (prover properties), Vācaspati, in effect provides two separate arguments, one from *being produced* and one from *having insentient material causes*. He does, however, focus on *utpattimattva*, *being produced* in the rest of this commentary.
[11] Jayanta also provides a similar argument from *kāryatva.* See Varadacharya, ed. 1969: 492; translation in Bhattacharyya 1978: 406.

individually. To my mind, the distinguishing feature of design arguments is the attempt to establish conscious agency of some kind, while the distinguishing feature of cosmological arguments is the attempt to establish a fundamental, regress-stopping ultimate reality of some kind, whether it be an original efficient cause (Aquinas), or an ultimate necessary truth (Leibniz).

It is true that Nyāya does not devote much attention to an analysis of teleology. Nevertheless, the above arguments focus on aspects of the world whose structure, coupled with their materials' being insentient and incapable of independent action, is supposed to trigger the recognition of agential causation. A. Chakrabarti (1989: 22) himself notes that the main issue at stake is the *complexity* of the physical universe, not its mere existence. Quite telling is a refrain found in Uddyotakara's consideration of alternative theses for the efficient cause of the creation: *na yuktam etad acetanatvāt,* "that is not acceptable, owing to insentience." This implies that the crucial issue in his proof is the need for conscious, volitional agency to account for the complexity of the manifest world. I admit that the distinction between teleological and cosmological arguments is sometimes blurry,[12] and in claiming that the *kāryatva* is best understood as a teleological argument, my intent is to call attention to structural features of the Nyāya proof, not provide an unambiguous label. As will be seen in the next section, the *kāryatva* argument faces objections which, in Western philosophy, are traditionally directed toward design inferences: charges of anthropomorphic projection of common experience onto the cause of the cosmos and inductive or analogical failure. The similarity between the objections of Nyāya's opponents and Western opponents of the design argument (most famously, Buddhists like Dharmakīrti and Ratnakīrti and David Hume respectively) is not due to mere historical accident, but to deep similarity of argumentative structure.

[12] Thanks to Rob Koons for stressing this point to me in conversation.

Nyāya considers the recognition of design to follow from experience and induction. It does not postulate an innate capacity to perceive intelligence such as that proposed by Thomas Reid. Through wide experience (*bhuyo-darśana*), we apprehend a *vyāpti* (invariable concomitance) between effects of various kinds and intelligent makers. We then infer such makers in the presence of similar effects. The producthood argument is thus meant to champion an inference that commonly takes place for oneself in the presence of artifacts.

The following is an analysis of the individual components of the argument from *producthood* which focuses on Vācaspati and Udayana's proofs. The inferential subject (*pakṣa*) of Udayana's argument is *earth and the like* (*kṣityādi*). What is the extension of *earth and the like*? Vācaspati notes that extant things may be divided into three categories: things that certainly have a maker, like palaces; things that certainly have no maker, like eternal atoms and space; and things of which it is debated whether they have a maker or not, including human bodies, trees, the earth, and mountains. He takes everything within the third group as his inferential subject. The extension of Udayana's *earth and the like* is most reasonably understood along the same lines. This reading harmonizes with Udayana's formulations of the *pakṣa* in other works.[13] In any case, what such examples share is the

[13] From the *Ātmatattvaviveka*:

> That about which there is a dispute whether it has a maker
> does have a maker;
> because it has the nature of an effect.

In the *Kiraṇavalī*, Udayana reformulates the inferential subject to avoid some of the problems imputed by his opponents. He employs a five-step argument form:

1. That which has the property of origination independent of a [maker's] has for its cause an intelligent being;
2. because it has the nature of that which has a cause.
3. Whatever is caused has an intelligent being as a cause, like a chariot.
4. Thus are the objects in question [which have origination independent of a maker's body].
5. Therefore, this is also caused by an intelligent being.

quality of being some feature of the world which exhibits a certain kind of structure. Given the formulations by Udayana and Vācaspati in particular, I suggest that the *kāryatva* proof is most akin to a local design argument.[14]

What are the criteria employed to determine the prover property (*hetu*) *producthood* (*kāryatva*)? Vācaspati claims that products are made of parts, have finite magnitude, originate within time, and (following Uddyotakara) are composed of constituents that, due to insentience, are incapable of independent movement. Udayana equates *kāryatva* with being a composite whole (*sāvayava*).[15] The early Naiyāyika Aviddhakarṇa, fragments of whose work is preserved in the Buddhist Śāntarakṣita's *Tarkasaṁgraha*, suggests the property *having a particular conjunction of parts* (*avayava-sanniveśa-viśeṣa*).[16] Jayanta agrees, suggesting the property *sanniveśa-viśiṣṭatva*. (Varadacharya, ed. 1969: 493-4; translation in Bhattacharyya 1978: 407).

What is the nature of the maker that they want to establish (the *sādhya* of the proof)? The argument from *kāryatva* does not mention *Īśvara* within the syllogism (*prayoga*) itself. It merely establishes a maker of the entities within the extension of the *pakṣa*. Of course Nyāya further argues that only *Īśvara* fits the bill. The cosmic maker's omniscience (*sarvajñātvam*) is suggested according to the requirements for it to create the manifest world. By induction it is argued that makers must have direct awareness of the material causes of their creations. The material causes of the world are atoms, individual selves, and the karmic merit that determines the circumstances individual selves will face. These entities are supersensible in a very strong sense—not merely too small to be seen by the naked eye, but are categorically

---

Chemparathy (1972: 88) notes that despite the various formulations of the *pakṣa*, the extension remains the same as "earth, etc." Arindam Chakrabarti (1989: 26) discusses many other formulations of the *pakṣa* commonly given by Naiyāyikas.

[14] Local design arguments focus on the design of some features of the universe, while global design arguments take the universe itself as their inferential subject.

[15] He gives this definition in the *Kiraṇāvali*. See Chemparathy 1972: 86n.

[16] Bhattacharya 1961: 43 and Vattanky 1984: 17.

beyond the range of (non-yogic) perception, even if such perception is augmented through optical enhancements of various sorts. Therefore, the maker must possess something like an all-embracing cognitive power.[17]

Naiyāyikas want to establish more than omniscience for the maker. His omniscience is both eternal (*nitya*) and unproduced (*akārya*).[18] This differentiates his cognition from that of certain kinds of enlightened yogins whose yogic perception potentially allows them a kind of all-embracing cognitive power. Udayana argues for the eternity of God's omniscience on the grounds that it is not an effect. Since God has no body and no *manas* (mental faculty), his cognitions are not produced but an eternal part of his very nature. Vācaspati argues that the putative *vyāpti* between *being a cognition* and *being non-eternal* is vitiated by the *upādhi* of *being produced*. Without such an *upādhi*, he argues, cognition is eternal.

Īśvara's being unembodied is established on a number of grounds, but primarily because he is the initial combiner of the atoms and souls in the beginning of creation, and must therefore have no body of his own, on pain of infinite regress of creators.[19] By induction, cognitions are produced if and only if there is a causal nexus involving something like a body-mind (*manas*) complex to produce them. There is no evidence whatever for the production of knowledge by means other than such a body-mind complex. God must have cognition, since he fashions the world. But his cognition must be immediate and unproduced,

[17] See Vācaspati's arguments in Appendix B. Udayana further supports the omniscience of *Īśvara* by appeal to his authorship of the Vedas, which speak of earlier creations and heavenly realms, indicating that *Īśvara* does indeed perceive all. See Chemparathy 1972: 169-71.
[18] NVT 4.1.21; ND 956.
[19] Naiyāyikas recognize that one may propose an infinite regress of embodied creator gods, each making the body of the next god, and never arriving at an original unembodied Creator. They also acknowledge that such a regress is not necessarily illegitimate, since an infinite past is possible. To respond, they invoke the principle of *lāghava* (lightness or simplicity), akin to Okham's razor. Simply put, the principle of *lāghava* suggests that in the absence of decisive evidence, it is better to postulate as few supersensible entities as possible to explain an event. Simpler theories are preferable to more complicated ones, ceteris paribus.

being one with his nature.[20] Vācaspati considers God's awareness to be a single cognitive act which ranges over the entire creation.[21] This feature of Nyāya theology helps rebut a Buddhist charge that as a being that undergoes constant experience, God would undergo constant change and therefore lose his essential unity.[22]

To summarize, the following is an analysis of Udayana's account of the argumentative closure[23] from a maker to God:

1. A maker fashions the objects within the extension of the *pakṣa*. (The conclusion of the initial argument.)
2. All makers have direct awareness of the material causes of their creations.
3. The maker of the universe is conscious, having direct awareness of the material causes of the creation. (From 1, 2)
4. The material causes upon which the maker operates (atoms, selves, and their karma) are supersensible. (This follows from Nyāya metaphysics, supported by arguments given elsewhere.)[24]
5. Only an omniscient being can perceive supersensibles. (This follows from Nyāya metaphysics and epistemology, supported by arguments given elsewhere.)[25]

---

[20] See Chemparathy 1972: 169-172 for a good discussion of the preceding argument. Though Vācaspati and Udayana hone the case for *Īśvara's* cognition being eternal, its seeds are in Uddyotakara's Vārttika (NV 4.2.21; ND 950).
[21] Uddyotakara underscores the directness of God's cognition by stating that it is *pratyakṣa*, perceptual (NV 4.2.21; ND 951).
[22] Hayes (1988: 14) summarizes Dharmakīrti's argument: "Even if there were a simple, beginningless and endless being endowed with the faculty of intelligence, such a being could not know the events of a transitory world, for if such a being knew each event separately as it occurred, then he would have a plurality of cognitive acts and would lose his unity."
[23] I am using this word to designate the step of the argument that moves from a cosmic designer or first cause to the God of traditional religion. I borrow this usage from Rob Koons. Ratzsch (2005) calls this the "natural theology step" of design arguments.
[24] See NB 4.2.13 for discussion of the categorical imperceptibility of atoms.
[25] In conversation, Stephen Phillips has also noted that the *Īśvara's* omniscience is also supported by the following argument: Everything is interrelated in at least the weak sense involved in the concept of

6. The maker in question is omniscient. (From 3, 4, 5)[26]
7. The creator does not have a body and *manas.* (From various arguments outlined above.)
8. All cognitions that are produced require a body and *manas* (mental organ).
9. The creator's cognitions are unproduced. (From 3, 8)
10. All things that exist without being created are eternal (*nitya*). (Taken as a tautology.)
11. Therefore, the creator is omniscient, and his omniscience is a product of his very nature, being unproduced and eternal. Only *Īśvara* (God) is such a being. (From 6, 9, 10)[27]

A similar argument is used to establish God's exhaustive power. Only a being with vast power could control the supersensible atoms at all times and places without use of a body. His power, unmediated by a body, is also a product of his very nature.

4.2 Objections and Responses

An interesting feature of classical Indian thought is the existence of various atheistic traditions which simultaneously reject physicalism. Of course, classical India's most notorious atheists, the Cārvākas, are physicalists. They argue that consciousness is an

mutual absence. So the *Īśvara* has to know everything (there is to know) to be able to put each thing in its place, so to say, in relation to everything else.

[26] Again, this is given independent support by the argument that *īśvara* authors the Vedas, which are veridical. The Vedas speak of supersensible things and previous creations, which shows that *Īśvara* has perception of previous creations, and is thus omniscient.

[27] God's eternality is also supported by the following reasoning: since, presumably, only compounds can decay, God, who is simple, cannot decay. Moreover, since God initiated creation, he must have trans-creational existence.

emergent property of matter, akin to the emergent power of fermented grains to inebriate.[28] In this sense, their atheism is quite modern. Aside from them, however, a number of Indian schools reject physicalism, defend the post-mortem survival of consciousness, and aim for some salvific state, while rejecting the existence of *Īśvara*. They usually accept the existence of various gods who are worthy of human homage (as do most Buddhists and Mīmāṁsakas). Such gods do not stand above creation, however. They are firmly entrenched within it. The primary atheistic "orthodox" schools (those which accepted the status of the Veda as a privileged body of knowledge) were Sāṁkhya and Mīmāṁsā. Besides the Cārvāka, the primary atheistic "heterodox" schools were Buddhism and Jainism.

Each school has particular motivations for its atheism. The "classical" Sāṁkhya of Iśvarakṛṣṇa claims no theoretical need for *Īśvara*, contending that the work of creation may be accounted for by the inherent teleology of insentient primal matter.[29] Mīmāṁsā denies a creator God in order to safeguard the sovereign status of the Veda.[30] Buddhists regard the notions of self and substance to be fictions; God is the greatest of such fictions, imagined to support the universe much as a self is imagined to support the fluctuating psychophysical states of an individual person.[31] As noted above some Vedāntic theists oppose Nyāya's rational theology. Their motivation is largely epistemological. Convinced that the Brahman

[28] Mādhavacārya 2002: 4.
[29] SK 22, etc. Larson (1979: 124-5) and Bryant (2009: 92-3) note that a number of older strands of Sāṁkhya, often preserved in the *Mahābhārata*, are theistic.
[30] The idea behind this is that should the Veda depend on any kind of author, its authority would be jeopardized. Mīmāṁsā therefore argues that the Veda is eternally uncreated and authoritative in itself. The view embraced by Nyāya, that God authors the Veda and is the initial convention-setter for the denotation of individual words in ordinary language and in the Veda, is therefore a threat to Mīmāṁsā. In the context of this view, Mīmāṁsakas argue that no such creator God is tenable. See *Ślokavārtika,* the Sambandha-ākṣepa-parihāra chapter, verse 43 ff. for a representative instance of this dialectic. I discuss this debate more fully in Chapter 5. Chemparathy 1972: 79-80 provides a concise summary of the Mīmāṁsā anti-theistic position. Appendix A illustrates the connection between the idea of the Veda's authorlessness and the doctrine of *svataḥ-prāmāṇya*, or "intrinsic veridicality."
[31] See Jackson 1986 and Hayes 1988 for clear discussion of Buddhist anti-theistic arguments. See Patil 2009 for an extensive examination and translation of Ratnakīrti's anti-theistic *opus*, the *Īśvarasādhanadūṣaṇa*.

is known only through the contemplation of Upaniṣadic revelation, they disparage the attempt to establish God on purely rational grounds. While Nyāya contends with all the atheistic schools (less so with the Vedāntins), the bulk of its dialectic is developed against Buddhists and Mīmāṁsakas.

There are two broad argumentative strategies proffered by Nyāya's opponents in order to deny that Nyāya's putative knowledge of God is in fact the product of a genuine *pramāṇa*. The first purports to demonstrate that the theistic hypothesis is contradicted by secure *pramāṇa*-born cognitions and therefore untenable. The second purports to reveal an internal defect in the Nyāya proof. If either strategy is successful, Nyāya's supposed prover property, *kāryatva*, is reduced to a mere *hetv-ābhāsa*, a pseudo-reason, the argument fails, and (in the absence of other *pramāṇic* support) Nyāya's theistic belief is discredited. These two strategies correspond to inferential defeaters recognized by classical thinkers: (i) counterbalancing the conclusion of an inference with contrary information of equal or stronger epistemic footing and (ii) revealing an internal defect which undermines the inference.[32]

The first kind of refutation has two sub varieties: one may (ia) produce the countervailing evidence of *pramāṇas* other than inference, or (ib) produce a counter-inference. For example, though you infer that my mother is visiting me on the grounds that you see her car outside my house, I tell you that she is not visiting—I am merely borrowing her car while mine is in the shop. In this case, my expert testimony defeats your inference. Such an inference is thus *undercut*: "the probandum whose absence is definitively established by another *pramāṇa* is called 'undercut' (*bādhita*)" (TS §64). A counter-balancing inference acts according to the same principle, pitting a second inference against

[32] These correspond to contemporary notions of rebutting and undercutting defeaters or non-epistemic and epistemic defeaters. See Pollock 1986: 38-40 and Williams 1999: 51 respectively.

the original. I may not show how your argument is invalid, but I argue from equally strong (or stronger) premises that an opposite conclusion holds. In the absence of tie-breaking evidence, the second inference neutralizes the first, and the cognition produced by the first is thrown into doubt. "When there is another *hetu* which establishes that the probandum of the original inference is absent, the first is 'neutralized by a counter inference' (*sat*-*prati*-*pakṣa*)" (*TS* §60).

The other strategy to defeat an inference is, again, to illustrate a failure internal to the inference itself; to reveal the improper functioning of a putative inference token. Dialectically, this involves demonstrating the presence of an inferential fallacy.[33] There are many varieties and sub varieties of such fallacies, owing to the various ways in which a putatively legitimate prover property may go wrong. We will discuss particular fallacies as they are introduced in the discussion below. Most generally, fallacies fit into two broad categories: (iia) the supposed prover property does not properly qualify the inferential subject (*pakṣa*), or (iib) the prover property is not invariably concomitant with the probandum. To return to the example above, fallacies of the first sort (iia) would arise if my friend claims that my mother's Mazda is parked in front of my house, when in fact the car in question is a BMW. In this case, the prover property *1991 Mazda Miata* does not qualify the automobile in question, and therefore it cannot generate inferential awareness of my mother's presence. There are variants of this fallacy, but in any case, the prover in question is not properly linked to the corresponding inferential subject. In the latter case (iib), the known relationship between the prover property and the probandum is insufficient for the former to reliably indicate the latter's presence. The putative *vyāpti* fails. A neighbor's claim that my mother must be visiting since there is a Mazda in front of the house is vitiated by the

---

[33] Please note the fairly broad use of "fallacy" here. In Indian thought, an argument which was counterbalanced was considered "fallacious." In such instances, perhaps the contemporary notion of *defeater* is more apt.

fact that the *hetu Mazda* is too broad, being concomitant with both the presence and absence of my mother. Technically this *hetu* is known as *anaikāntika* or "deviating." The presence of any of the above defeaters renders the original *hetu* or inferential reason a mere pseudo-reason, a *hetv-ābhāsa*.[34]

We will now examine representative arguments.

Counterbalancing arguments. A common counterbalancing argument focuses on the motivations of a creator God, and incorporates the problem of evil in an interesting way. The great Buddhist Vasubandhu considers two options, both of which run counter to the thesis of a cosmic maker. All purposeful actions are initiated for the sake of the satisfaction of sentient beings. Therefore, creation must occur either for God's satisfaction or the satisfaction of those beings who will inhabit the world. If he creates for the sake of facilitating his own happiness the being of whom we speak cannot really be God, since God is traditionally understood to be self-sufficient. Conversely, if creation were for the sake of the denizens of the world, then given the attributes commonly ascribed to God, there wouldn't be such misery in the world. Therefore, there can be no such creator God.[35] The great Mīmāṁsaka, Kumārila, rebuts the suggestion that it is impossible for God to eradicate all pain: "As everything depends on the mere will of the creator, what would be impossible for him?" (*SV,* Sambandha-ākṣepa-parihāra, texts 52-56).

Other counterbalancing arguments center on problems involved with an eternal, unchanging creator. Dharmakīrti, following Vasubandhu, argues that the moment God created the universe, he would have changed from being a non-creator of the world to being

[34] I have categorized the above defeaters and fallacies in a more streamlined way than our classical thinkers. For more information see Pandya 1984 and Gokhale 1992.

[35] For discussion of this argument, see Vattanky 1984: 16 and Hayes 1998: 15-16. Chemparathy 1968-9 discusses a similar argument from the fairly early Buddhist text *Yogācārabhūmi.*

a creator of the world. But God is supposed to be eternally unchangeable.[36] Therefore a creator God is impossible. Similarly, if God is aware of the varied transformations of the world and the things in it, he would undergo internal change in the form of new cognitions which reveal hitherto unknown content.[37]

Responses. In the third chapter of the *Nyāyakusumāñjali*, Udayana recognizes various arguments meant to prove the incoherence of the notion of a creator God, similar to those given by Vasubandhu, Kumārila and Dharmakīrti.[38] Many of them focus on God's alleged unembodiment: in common experience, all creators are embodied. Since God is held to be unembodied, he could not create. Udayana dismisses a number of arguments on technical grounds. Since their *pakṣa*, a creator God, is not taken to be real by those putting the arguments forth, such arguments fail on the grounds of *āśraya-asiddhi*, the non-establishment of the foundation of the inference. This strategy, again traceable to Vācaspati, is similar to that used by Jayanta to respond to certain arguments against the legitimacy of yogic perception, as seen in Chapter 3.[39] Again, the problem is that of term-introduction. Only a real entity may exist as the *pakṣa*, inferential subject of an inference. God cannot be put forth as an inferential subject by one wishing to deny his existence, since such requires that he exist from the start. To us, this strategy likely seems sophistical, since the arguments of his opponents have real philosophical bite. But, as will be seen, Udayana does not ignore

[36] This argument is part of a more general Buddhist argument that a single, simple entity cannot produce varied effects without being momentary. See Jackson 1986: 339 and Hayes 1988: 11-15.
[37] See Vattanky 1984: 35, 37-8, Jackson 986: 324 and Hayes 1998: 18-21. These latter arguments tend to depend on certain metaphysical presuppositions regarding change and identity which Nyāya does not share with Buddhists. Buddhists hold that something cannot create varied effects while maintaining diachronic identity. Nyāya disagrees. Still, such arguments may be more cogent when applied to God, since God is traditionally considered free from the fluctuations which characterize worldly substances.
[38] Dravid, ed. 1996: 208ff.
[39] Dravid, ed. 1996: 230.

their import. He merely shifts the problem space in which they will be tackled. The objections will be reintroduced below, when considering the legitimacy of Nyāya's inductive extrapolation. As an aside, Udayana explains that the correct way to formulate a counterfactual or hypothetical is by qualifying a real entity with a false predicate. Given the looseness by which Nyāya allows terms to stand as subjects and predicates,[40] this allows for much flexibility.

Regarding the alleged *vyāpti* between creation and embodiment, Udayana rejects the notion that each instance of agency requires a body as a causal intermediary. Mental causation may directly operate on a body. If a bodily intermediate were required for me to move my hand, then I couldn't move my hand without another body to assist in that movement, and another for that movement, *ad infinitum*. Such mental causation is taken to be a model of God's creative power.[41] God's relationship with atoms, for example, is direct, akin to an individual's relationship with his or her body. This is discussed further below.

Udayana devotes a fair amount of discussion to the argument that non-perception (*anupalabdhi*) refutes God's existence. As noted in the previous chapter, his response is that non-perception is a legitimate *pramāṇa* only when the unseen objects are fit to be seen in the conditions which hold at the time of non-perception. Since God is not held to have a body he is naturally imperceptible to ordinary senses. Therefore, non-perception is insufficient to prove his non existence.

Regarding the problem of evil as a defeater of the inference to *Īśvara*, I will simply give a synopsis of the basic Nyāya strategy, as I prefer to focus on strictly epistemological questions. In short, Nyāya tends to argue that individual suffering is due to the law of karma: immoral past deeds result in current sufferings of various sorts. God is, to be sure, the

[40] See Shaw 1989.
[41] The seeds of this response go back to Uddyotakara. See Jha 1984:1469.

overseer of the functioning of the mechanism of karma, and is, therefore instrumental in human suffering. Thinkers like Udayana therefore argue that the suffering attributable to God's instrumentality is akin to the suffering caused by parents (while punishing a child), teachers or physicians. As the suffering is meant for the betterment of the individual in pain, it is attributable to the compassion of the pain-giver. Moreover, many Naiyāyikas hold that God does not have the ability to undermine the karmic system, but only to carry it out (a limitation of God's power not accepted by other Indian theists, particularly those in the *bhakti* traditions). These Naiyāyikas are, in effect, willing to sacrifice some of God's power in order to save his moral goodness. Finally, they argue, God's compassion is further manifest in the fact that he works for the enlightenment of individual persons by disseminating scripture and other sources of *dharma* and yogic practice, which, when appropriately followed, result in ultimate felicity, emancipation from the karmic cycle altogether.[42] The creation is seen, in this sense, as a chance for unenlightened beings to work through their karmic inheritance and ignorance in order to achieve salvation. At first blush, this seems an illicit appeal to specific religious doctrines in order to patch what was supposed to be a wholly rational argument. But in the classical context, where Nyāya's opponents also accept the law of karma, this response does not seem illicit.

Breach of inductive boundaries. Though the above attacks pose a serious challenge to the Nyāya position, from an epistemological point of view, the most interesting arguments accuse Nyāya of violating the boundaries of legitimate inductive extrapolation. This charge, pressed by Buddhists and Mīmāṁsakas, regards the putative *vyāpti* which undergirds the inference to God. In short, it claims that being grounded in the experience of ordinary, common artifacts and ordinary, common makers, no supposed *vyāpti* between products and

[42] See Chemparathy 1972: 158-62 for a concise account of Udayana's response to the problem of evil.

makers may be cited to support inference of a wholly unique, Godlike creator of the manifest world.

This criticism may be familiar from Hume's attack on the design argument. Hume's concern is that the argument from design operates by illicitly ignoring certain features of what we may call the relata of the putative *vyāpti*. In the *Dialogues*, he has Philo remark:

> If we see a house, Cleanthes, we conclude, with the greatest certainty, that it had an architect or builder because this is precisely that species of effect which we have experienced to proceed from that species of cause. But surely you will not affirm that the universe bears such a resemblance to a house that we can with the same certainty infer a similar cause, or that the analogy is here entire and perfect. (Hume 1990: 837)

Thus, the "marks of design" are only legitimate indicators of agency when they qualify things already experienced by us as having makers.

> Order, arrangement, or the adjustment of final causes, is not of itself any proof of design, but only so far as it has been experienced to proceed from that principle. (Hume 1990: 838)

Mackie, following Hume, claims that

> We can never argue back to any further conclusions about the ordinary world or our future experience which go beyond the data from which the inference began. (Mackie 1982: 136)

Nyāya's opponents anticipate Hume while framing their concerns according to the argumentative machinery of classical Indian inference. A pioneer in this regard is the Buddhist Dharmakīrti,[43] who, in effect, argues that one can legitimately infer the property *has a godlike maker* only if the inferential subject were qualified by the prover property *product of a godlike being*. From something like *producthood simpliciter*,[44] one can infer only a probandum from the class of makers, viz. finite, embodied, "non-godlike" makers, which were previously experienced and employed in the generalization which grounds the pervasion of *producthood* by *having an intelligent maker*. The prover *product of a godlike being* is, however, unavailable to the Naiyāyika, since there would be no available token of inductive support (*dṛṣṭānta*). It may be recalled that in arguments meant to convince another, there is a requirement that one provide an example of inductive support, a known instance of correlation between the prover and the probandum. Dharmakīrti argues that Nyāya is unable to cite an example of inductive support which illustrates the co-instantiation of "product of a godlike being" and "has a godlike maker." There is *asiddhi dṛṣṭānte*, unestablishment (of the *sādhya* or target property) in the example (a pot).[45]

The Buddhist Śāntarakṣita makes a similar claim: there is an illicit ambiguity in Nyāya's *hetu* "particular conjunction of parts" (*avayava-sanniveśa-viśeṣa*). Indeed, he notes, things which are within the class of those entities with a particular conjunction of parts *that are known by common experience to have intelligent agents* lead us to infer such agents when

[43] Both Vattanky (1984: 33, 39) and Kajiyama (1998: 95n255) consider Dharmakīrti the central architect of the Buddhist response to the Nyāya argument from design. Chemparathy (1972: 78) notes that Dharmakīrti "initiated a new approach to the problem of Īśvara and a new method of attacking the Nyāya-Vaiśeṣika Īśvara doctrine."
[44] He specifically cites such prover properties as "acting after a period of rest" (*sthitvā pravṛtti*), "a particular arrangement of parts" (*saṁsthāna-viśeṣa*), and "purposeful action" (*artha-kriyā*).
[45] Dharmakīrti 1968: 12-18. Kumārila makes a similar point in *Ślokavārtika*, Sambandha-ākṣepa-parihāra, 80.

we see them. For example, there are architectural structures such as houses. But things like the earth, hills and bodies, though comprised of a particular conjunction of parts, are not known to be conjoined with intelligent makers and therefore their existence does not entail the existence of an intelligent maker.[46] Ratnakīrti, the last great Indian Yogācāra Buddhist philosopher, argues such that Nyāya is stuck in a dilemma. If the probandum (*sādhya*) is to be construed as a Godlike maker, then Nyāya cannot cite a *sapakṣa*, or token case of inductive support. If is to be construed as a *maker-in-general,* then Nyāya lacks the resources to infer the existence of *Īśvara*.[47]

Other arguments advance the related claim that the probandum must share relevant properties with the makers known in common experience, properties which Nyāya ignores. Most especially, Nyāya's maker of the universe must have a body, as the reference class of makers which we have experienced, from which we become aware of the *vyāpti* between *producthood* and *having an intelligent maker*, is entirely populated by embodied beings. This objection is pressed by Prabhākara, the eminent Mīmāṁsaka, as well as Kumārila, who uses this to generate another antinomy: insofar as he is a maker, God requires a body, since, by induction, all makers have bodies. But as bodies are products, another maker would be required to create God's body. Should Nyāya contend that God can create his own body (or that he has no body), Kumārila responds that unembodied beings would have no capacity to create.[48] Again, compare Mackie:

> All our knowledge of intention-fulfillment is of *embodied* intentions being fulfilled *indirectly* by way of bodily changes by way of bodily changes and movements which are *causally* related to the intended result, and where the

[46] *Tarka-saṁgraha*, kārikās 61-65. Also see Vattanky 1984: 43.
[47] Patil 2009: 164.
[48] Jha 1962: 41, Jha 1983: 361, and Bilimoria 1990: 485-9.

ability thus to fulfill intentions itself has a *causal history* . . . only by ignoring such key features do we get an analogue of the supposed divine action. (Mackie 1982: 100)

Response. First, some context. The last chapter noted that Nyāya's defense of yogic experience required a principled extension of the notion of perception to include the possibility of supernormal perception. Nyāya's opponents, particularly Kumārila, argued that perception proper is perception of the kind we know, and therefore yogic perception is, in effect, a contradiction in terms. It was incumbent upon Nyāya to develop a model of perception which stretches far enough to allow for yogic experience, but not so far that it deviated from the general notion of perception (*pratyakṣa*). This principled "stretching" of ordinary *pramāṇas* is a sub-text of Nyāya's broader defense of theism, and it again surfaces in the context of inference. The opponents we are considering may be cast as epistemologically conservative and concerned that Nyāya's appeals to yogic perception or inference to God extend ordinary notions of *pramāṇas* too far. In our current context, Nyāya's proof is taken to be too powerful. It would, opponents contend, generate unwanted consequences if allowed to stand. Dharmakīrti famously compared Nyāya's inference for God to the inference to fire from the observation of some white thing. The basic point is that there is only a nominal similarity between white smoke and some other white thing. They are both qualified by the property "white." But this similarity is not nearly enough to allow an inference from any token white thing to fire. So too, is the earth's *producthood* only nominally similar to that of common artifacts.[49]

An allied conservatism seeks to reinforce the *vyāptis* (inferential concomitances) of ordinary experience and therefore rigidify inferential boundaries. In his proof, Vācaspati's

---

[49] Dharmakīrti 1968: 13

(NV 4.1.21) imagined interlocutor reflects this conservatism, offering the following counter-arguments:

> Objects like the earth are not made by an all-knowing maker, *since they are existing objects of knowledge*, like pots.

In common experience, it is argued, to be known is to be known by beings who are not all-knowing. Moreover,

> God's cognition would not have all things within its scope, and would be non-eternal, *since it is a cognition*, like our cognitions.

Again, in common experience, to be a cognition is to be momentary and to have a limited scope. The interlocutor also asks,

> Wherefrom arises the property *being a maker, the range of whose cognitions is eternal*? For it is not found to be a property of the substance in the example of things like a pot.

The Nyāya response to the current challenge is to demonstrate that the extrapolation illustrated in the argument to *Īśvara* is in fact a part of common inferential practice and therefore, rejecting it would entail the violation of well-founded epistemic norms. I would suggest that implicitly, Nyāya could appeal to the virtue of a more liberal epistemic practice, as is evinced in common life. Vācaspati argues that it is reasonable to infer new kinds of things in general-to-particular inductive reasoning. This idea depends upon a feature of

Nyāya's theory of inference, commonly called *pakṣa-dharmatā-bala*, "the strength (*bala*) provided by the prover's qualifying (*dharmatā*) the inferential subject (*pakṣa*)." This principle allows one to infer a probandum or target property (*sādhya*) whose characteristics are unpacked in such a way as to account for the prover property's qualifying the inferential subject. In other words, within inference, it is legitimate to generate a *sādhya* with some properties unlike those held by members of the reference class (the *sapakṣa* class), if such properties are required to explain how *this very pakṣa* is qualified by *this very hetu*. The following is Vācaspati's introduction of the principle, deployed in the context of his proof for God's existence.

> Opponent: The property *being produced* is concomitant with *being preceded by a maker cognizant of the material cause and the like, simpliciter*, as seen in things like pots. You may establish this much only: that such *simpliciter* should hold for things like the earth. Wherefrom do you get the property *being a maker, the range of whose cognitions are all eternal*? For it is not found in the example of things like a pot.[50]

> Vācaspati: What would happen to the inference that would prove the existence of visual organs and the like from the experience of things such as color through the property *being an action*? For actions like cutting don't commonly establish the existence of sense-faculties; they establish the existence of things like axes.[51] But that there is a prover property which

[50] The opponent thus allows for the inference to go through in an attenuated form. Reminiscent of Hume's allowance for some vague principle of intelligence behind the cosmos in the *Dialogues*, Vācaspati's opponent now restricts his objection to the robust theistic conclusion of the inference.
[51] The principle that every action requires an instrument is assumed here.

> establishes the existence of *sense faculties*—though indeed it is never found to be a property of the cited example—is established by the principle of *pakṣa-dharmatā-bala* (the strength of the hetu's qualifying the *pakṣa*). For *being an action*, present in the perception of things like color, establishes a causal instrument which is capable of effecting cognition. Things like axes lack such capacity. From *pakṣa-dharmatā-bala* something previously unknown, which is distinct from things like axes is brought into the picture. (NVT 2.1.21; *ND* 954)

One's experience of various actions like the cutting of blades establishes a concomitance between *being an action* and *requiring a causal instrument*. In the case of cutting, the causal instrument required is something like an axe or knife. Later, reflecting on the phenomenon of perception, we recognize that is a kind of act. Thus, like the cutting of wood, it requires an instrument. But in the case of perception, we require an instrument capable of generating the given result, phenomenal awareness, and things like axes or knives will not serve such a purpose. Therefore, we take the notion of *instrument in general* and apply it to the case at hand to infer a visual faculty which is nothing like an axe except for its being an instrument.[52]

Clearly, the force of *pakṣa-dharmatā-bala* is something like inference to the best explanation. A slight difference is that Nyāya contends that it is not an independent kind of reasoning. It is, rather, a common part of general-to-particular induction, insofar as one must

---

[52] See Bulcke 1947: 40 and Vatanky 1984: 54-5. Also see Jayanta (trans. Bhattacharyya 1978: 414-416, 419).

always learn something new in such inferences.[53] This is explained in the *Tarkabhāṣā* (§ 49).

> Fire is established as a property of the hill owing to the strength of the *hetu's* qualifying the *pakṣa* (*pakṣa-dharmatā-balāt*). . . by [knowledge of] invariable concomitance (*vyāpti*), the probandum is established in general (*sādhya-sāmānya*). But, by the strength of the *hetu's* qualifying the *pakṣa*, that the probandum has the *particular condition* of being related to the *pakṣa* is established. Fire, as connected to [this very] hill is thus inferred by the property *having smoke* predicated of the hill. Otherwise, what need would there be for inference, since knowledge of the invariable concomitance alone establishes the probandum in general? (Slightly modified translation by Iyer 1979: 89)

Pakṣa-dharmatā-bala is the feature of inference which brings forth new information. In fairly standard cases, the new information is something like "*that very hill* is on fire." While smoke in a distance indicates that fire, generally speaking, is somewhere, realizing that the smoke is emitting from *that* hill indicates that *that* hill itself is a locus of fire.[54]

I suggest that *pakṣa-dharmatā-bala* allows Naiyāyikas the inferential innovation required for the expansion of human knowledge, while keeping their inferential practice firmly moored to the data of experience. In the inference to *Īśvara*, the new information is that *this universe has a maker*. But beyond this, the nature of the creator may be unpacked to

[53] By general-to-particular induction involves the application of an inductive generalization to a specific case. E.g., "This man is a professor; therefore it is likely that he has a doctorate, since almost all professors have doctorates or equivalent degrees." Conversely, particular-to-general induction consists of the extrapolation of general patterns or concomitances found in a sample set.
[54] Jayanta notes that we are moreover sometimes able to tell the kind of wood burned in a fire by the fragrance of the smoke, or tell the skill of a weaver by the cloth. See Bhattacharyya 1978: 419.

the degree necessary to account for *producthood's* qualifying the universe. The agent who creates the world must have special qualities beyond the creators of our common experience to account for the fact that *producthood* qualifies the inferential subject *earth, etc.* If things like earth, trees, human bodies, mountains, etc. are indeed created, the nature of the inferred creator must be appropriate to account for that fact. It must have power and intelligence beyond the makers of our experience.[55]

Nyāya would agree with the method of the prophet Jeremiah, as summarized by Swinburne (2004: 154), "he argued to the power of the creator from the extent of the creation." Udayana defends this kind of reasoning by clarifying the procedure involved in the argument. There are two steps, which his opponents have conflated into one. In the first part of the argument, one need not worry about *Īśvara* or his alleged properties. The only concern is over the properties we can infer about *the earth and such*. Nyāya holds that they are shown to have a maker, whose qualities are thus far unspecified. Then a second step is employed to determine the nature of the maker. Since the alleged special properties do not arise at the time of the initial inference, there is no contradiction with the reference class from which the concomitance between products and (ordinary) makers gains strength. There is only a legitimate extrapolation of *makerhood* based on the evidence provided by the initial step, which demonstrated that the inferential subject is qualified by *producthood*. Only by a conflation of the two steps does an apparent contradiction arise in the argument.[56][57]

---

[55] Robert Adams (1987: 252) employs a similar principle in his essay "Flavors, Colors and God": "If such a deep structural feature of at least the conscious part of nature as the correlation of phenomenal qualia with physical states is to be explained by the action of a voluntary agent, the agent will pretty well have to have such knowledge and power, and such a creative role, as to count as a deity."
[56] Bhattacharyya 1961: 107ff. Ratnakīrti argues against this usage of *pakṣa-dharmatā-bala*. His objections will be noted in the next section.
[57] To achieve the same goal, Jayanta argues that the inference to *Īśvara* is of the *samanyato dṛṣṭa* type (see section 2.2), which does not require direct perceptual acquaintance with both relata of the *vyāpti*.

Regarding an illicit ambiguity in the prover property, Vācaspati's interlocutor provides an argument similar to that of Śāntarakṣita above:

> This concomitance (*vyāpti*) is conditioned (*aupadhikī*) and exists only in the case of products that are experienced as being made by someone. This is the case only for pots and the like, whose existence is known depend on an intelligent agent. But it is a different matter for products in general such as bodies, mountains, etc., whose dependence upon an intelligent being is doubtful.[58]

The heart of this contention is that one may legitimately infer an agent from within the class of objects (*taj-jātīya*) which one has personally perceived to be connected with an agent. Vācaspati challenges his opponent to answer whether this actually holds in common practice. If we have perceived only the production of pots but not mansions, can we infer only that the former has makers but not the latter? Clearly, we do not commonly follow such restrictive rules in everyday inferential practice. Vācaspati suggests that mansions, like mountains and bodies, belong to the class of *products* (*kārya-jātīya*), all of which are concomitant with *having an intelligent maker*. So too, he argues, the earth. He contends that this understanding is more harmonious with common inferential practice.

Problems of Closure: J.L. Mackie (1982: 133) has suggested that it is better to call the teleological argument an "argument for design" than an "argument from design," since the dialectical burden of teleological arguments is to establish that there are in fact marks of design in nature, not to make the trivial move from such marks to a designer. Though the

[58] This translation of a portion of Vācaspati's commentary on NS 4.1.21(ND 601) is a slightly modified version of Bulcke (1968: 41). Again, Ratnakīrti develops this argument, as seen in Patil 2009.

import of his insight is well taken, I think that it minimizes the real challenge which philosophers and theologians face in the attempt to achieve argumentative closure, the step which moves from an unspecified creator of the world to a being which corresponds to the God of classical theism. In the Indian context, this challenge is illustrated by the fact that some of Nyāya's opponents choose not to deny that the particular structure of things like the earth indeed indicate some kind of intelligent cause (indeed, even Buddhists are willing to grant this in a limited way). But they do deny that such marks are enough to gain purchase on God. The Vedāntic theist Rāmānuja argues that at best the argument from *kāryatva* may establish some vague notion of cosmic creatorship, but not a unitary supreme being, akin to the Brahman of the Upaniṣads. A plurality of creators is equally plausible, given nothing more than the evidence of creation. Indeed, many artifacts of common experience require many makers working concertedly.[59] Dharmakīrti and Śāntarakṣita argue that at best, Nyāya proves the existence of many finite agents whose actions help continually create the world, which the Buddhist accepts already in the sense that individuals' karmic desserts collectively create the world as we know it.[60]

Response. Nyāya's argument for closure was analyzed above. Regarding what may be termed the *many-creators objection*, Naiyāyikas do recognize that one may propose an infinite regress of embodied maker gods, each making the body of the next god and never arriving at an original unembodied maker. They also hold that such a regress is not necessarily illegitimate, since it, like a temporal regress of trees and seeds, may still issue a real effect in this world. Therefore, Nyāya philosophers invoke the principle of *lāghava*

[59] He further challenges the notion that the creation of the world must have been simultaneous, which, if rejected, further supports a plurality of non-omniscient agents. *Śrī-bhāṣya* 1.1.3; Translation in Rangacharya and Aiyangar 1961, vol 1: 235-252. Also see Brown 2008: 127-134.
[60] Vattanky 1984: 36 and G. Bhattacaryya 1961: 61, n.4. Kumārila offers a similar argument in *Ślokavārtika*, Sambandha-ākṣepa-parihāra, 75-6. See Jha 1983: 360.

(lightness or simplicity), which is akin to Ockham's razor. Simply put, it states that in the absence of decisive evidence, it is better to postulate as few supersensible entities as possible to explain an event. This is also how Naiyāyikas also respond to the contention that their argument establishes a co-temporal plurality of makers as much as it establishes a single maker, with no way to prove God's unity. In his commentary on *Yoga-sūtra* 1.24, Vācaspati further argues that should there be a plurality of divinities which act in complete harmony, it would make sense to speak of them as a single entity.[61] Commenting on the same text, Vyāsa argues that should they be in a state of discord, the most powerful among them is *Īśvara* proper.

4.3 Evaluation and Extrapolations

In this section, I will evaluate Nyāya's arguments in light of the above objections. When required, I will provide rational reconstructions and supporting considerations for traditional objections and responses. While doing so, I will occasionally consider relevant counter-responses by Nyāya's opponents.

Overall argument structure. The challenge for arguments from design is to be simultaneously novel and mundane. Novel in that it tries to prove something extremely tendentious and remarkable—that a supernatural creator of the universe exists. It is much harder for it to be mundane; to strike observers as a non-controversial instance of familiar inferential patterns. The core of Nyāya's case is just this, that the inference to God is a non-controversial instance of familiar reasoning. I suggest that they would contend that novelty arises not from the structure of the argument, but from choice of *pakṣa*: the earth, mountains,

[61] Gopikamohan Bhattacharyya (1961: 151ff.) provides a good summary of this dialectic, particularly in response to Vedāntic criticisms.

bodies, etc. The argument from *kāryatva* reexamines things whose familiarity may lead them to slip under the argumentative radar, and recognizes a property in them which has profound, if hitherto underappreciated implications.

A few words on Nyāya's formulation of the inferential subject (*pakṣa*). By including things like trees and mountains within the inferential subject of the inference, Vācaspati has made them objects of dispute and prevents them from being cited as counterexamples.[62] He remarks,

> We cannot accept the claim "your argument is beset by *deviation* since it is seen that without a maker's effort . . . trees flourish in the forest." Such things are included in the *pakṣa* and as such, are still under dispute.[63]

Though he is, I think, clearly arguing in good faith, this strategy nevertheless affords him a great—and potentially unfair—advantage. "Deviation" is the translation of *vyabhicāra*, a technical term for one kind of *vyāpti*-failure. It occurs when there are well-attested counterexamples of the co-presence of the *hetu* (prover property) with the absence of the *sādhya* (probandum property), which illustrates that a prover in fact deviates.[64] In this case, the opponent cites alleged instances of things which have the property *being produced* without the property *having an intelligent maker.* Since all of the disputed cases are included within the *pakṣa*, the opponent's appeal to counterexamples like growing grass or trees are

---

[62] Patil 2009: 78 notes a Buddhist appeal to growing grass as a counterexample to Nyāya's argument.
[63] See the entire translation in Appendix B. In contemporary discourse, Plantinga (1990: 103) makes a similar move: "If [the objection under consideration holds], there must be available a nonempty class of objects known not to be the products of intelligent design; from this we may then construct our reference class by taking its union with the unit class of the universe. But what class would this be? Mountains, plants and the like will not serve, since we do not know that they are not the products of God's intelligent design."
[64] TS §58.

blocked. This strategy greatly enfeebles the opponents' resources to respond to the argument. But is it unfair or fallacious?

Jayanta (Varadacharya, ed. 1969: 495-8) has his interlocutor object: "If whatever we put forth in order to prove deviation is placed within the *pakṣa* by our opponents, the principle of inference would be undermined since even those inferences which deviate would be unobstructed."[65] Jayanta responds as follows. It is true that the nature of something cannot be pronounced by a disputant's whim. Should the opponent definitively establish that things like trees are part of the counterexample class (*vipakṣa*), the class of those things which exhibit an absence of *having an intelligent maker*, then indeed they could not be included within the inferential subject. But the opponents have not established such co-instantiation. The objection that a creator of trees is not seen is countered by Nyāya's contention that the creator is unembodied, hence imperceptible. The opponent may further argue that whether or not trees, etc. belong in the counterexample class is at least debatable. Since they are controversial, they should not be put forth as members of either the counterexample class or the class of similar cases (*sapakṣa*). Nyāya responds that this move would truly undermine inferential practice. The very condition of something's being the subject of the inference (*pakṣa*) is that its status is doubtful regarding the probandum property. The onus is, therefore, upon the challenger to redouble his efforts to prove that trees, etc. are definitively not made by a maker or come up with other compelling considerations. In the absence of such proof, and other things being equal, the structure of the inference is not illicit.

An allied problem, not directly discussed in the classical texts, involves the structure of design arguments more generally. It may be cited in order to charge Nyāya with something like faulty inferential procedure (perhaps verging on self-refutation): The *kāryatva* proof is motivated by the distinction between artifacts and products of nature.

[65] See Patil 2009: 143 for similar remarks by Ratnakīrti.

Indeed, its force is sharpened by considering why artifacts are unlike objects in the natural world. Therefore, the supposition that the world of nature is in fact a world of artifacts, albeit those of a superior creator, runs entirely counter to the very intuitions upon which the design inference rests. Because of this, such arguments should not be countenanced.[66]

Though such an argument is very clever, I do not think it poses a serious threat to Nyāya, or to design arguments more generally. It is not an unreasonable pedagogical procedure for one to make a distinction between two kinds of things on a superficial level, only to later reveal a more fundamental similarity. For the sake of educating her young son, a mother may tell him that the feature which distinguishes animals from plants is independent motion. Later, when the child has developed sufficient conceptual competence, the mother may inform him that some plants are capable of limited motion (e.g., Venus flytraps), while some animals cannot move (e.g., sea sponges). Given our deep familiarity with the natural world—a familiarity which may lead us to take it for granted—it is reasonable to think that should it bear the marks of design, it may take extra scrutiny to recognize it.

To my mind, one of the chief challenges for Nyāya is to effectively articulate the nature of its prover property (*hetu*). As noted above, Uddyotakara's *pakṣa* consists of the material causes of the manifest world, which, he argues, require intelligent guidance, being insentient. He reasons that insentient material causes require intelligent agency to take the form of complex effects. Vācaspati's *pakṣa* includes those "objects of dispute" which are made of parts, have finite magnitude, and originate within time. His prover properties are *having originated* and, like Uddyotakara, *having insentient material causes*. Other Naiyāyikas have focused on the composite effects themselves. Aviddhakarṇa suggests *having a particular conjunction of parts* (*avayava-sanniveśa-viśeṣa*) as the prover property,

[66] This argument was first brought by my attention in an undergraduate paper by my student Anjali Mohan.

and Udayana offers *kāryatva*, producthood.[67] Though some arguments take the material causes of composite wholes as the *pakṣa* and offer insentience as a prover property, and others take the composite wholes as the *pakṣa* and offer something akin to producthood as the prover property, the dialectical import remains the same: products with insentient material causes require conscious agency, and the mountains, trees, human bodies, etc. are products. Thus, they require a conscious maker.

It is striking that Naiyāyikas offer such a minimal account of *kāryatva*, requiring little to initiate the inference to design. Such broad criteria seem problematic as they may include too much within the scope of products. Is, e.g., a clump of clay qualified by *kāryatva*? It seems that Nyāya would say yes. Despite my attempts to find room for non-agential instances of structure (perhaps that of mere heaps) in the classical literature, it seems that for Nyāya, structure always involves agency: any instance of negentropy requires conscious agency, as conjunction requires movement and independently generated movement is impossible for insentient things like atoms. Gopikamohan Bhattacarya (1961: 79) accordingly takes Śrīdhara to recognize "the essential identity of causality with teleology." Vācaspati indicates this with his prover property, that something merely *be produced* (*utpattimat*) for it to have an agent. Kisor Chakrabarti (personal correspondence) endorses this reading: "In the Nyāya view nothing can come into being without agency." It would seem that the fears of Nyāya's opponents are well-founded. Prima facie, this is too powerful a principle and needs some boundaries.

To a large measure, this identification of creation simpliciter with having an agent relies on the details of Nyāya's atomistic metaphysics. For Nyāya, like most Indian schools, creation *ex nihilo* is abhorrent to reason. All creation, therefore, consists of the production of

[67] Aviddhanarṇa's use of the term "particular" (*viśeṣa*) is noteworthy, as it may provide for a more restrictive kind of conjunction of parts than the standard Nyāya approach to design (as seen below).

macro-objects by configuration of enduring micro-objects or primordial stuff. For Nyāya, this amounts to the configuration of atoms, selves, and other fundamental features of reality within the vast expanse of time and space. Such things are held to be motionless at the time prior to creation. Therefore, the identity of teleology and causality is tantamount to the thesis that any combination of smaller-objects into macro-object requires agency, and, therefore, any instance of combination without a creaturely maker demands the inference to God.[68] Indeed, Udayana offers a separate argument to the effect that the original combination of atoms in the beginning of creation requires God (the argument from *āyojana*, combination). Uddyotakara (NV 4.1.21; ND 957) suggests that grass, as something which can be apprehended by the senses (and therefore composite), has a maker.

The fairly radical tie between composition and agency entails that much of the dialectical weight in the *kāryatva* argument is dependent on Nyāya metaphysics, and accordingly weakens the proof for those of us (*all* of us, I suppose) who do not accept Nyāya's atomism (or something sufficiently akin to it). One would think that historically, what makes the argument from design such an enduring feature of the philosophical landscape is that it is fairly neutral regarding metaphysics. It tends to arise in various contexts independent of the details of metaphysical orientation. In the argument from *kāryatva*, the strength of the prover property best flows from common experience of the concomitance between products and makers, much like design arguments that we are familiar with in the West. To some measure, it does. But it would a much better argument if Nyāya developed a principled way to distinguish between accidental developments of structure (e.g., a lump of clay) and manifestly purposeful structure (e.g., pots, and putatively, the earth, etc.) To that end, here is a suggestion that would require little revision on the part

[68] This need for a mechanism for creation within an atomic metaphysics may be seen in Lucretius' contrasting strategy whereby a fundamental indeterminacy within atomic motion, the celebrated *swerve*, allows atoms to come into contact and produce macro-objects (*De Rerum Natura* 2.216-93).

of Nyāya: It could argue that incidental developments of structure rely on more fundamental instances of agential creation. While it may in fact be the case that a lump of clay requires *Īśvara's* hand to cohere, this is not because it is itself something which richly exhibits producthood. Rather, it is a component of something greater (e.g. a mountain) which exhibits producthood, and the structure which it exhibits must be understood according to its relation to a more obvious instance of purposive structure. There are analogous instances of such derivative structure. For example, a piece of the façade of a building, which has broken off, lying on the ground. Or a small segment of a biological organ, like a small piece of the human heart. In these instances, the structure which is evident lacks any clear *telos* or essential nature (*svabhāva*) because it is not seen in relation to the whole of which it was a component. On these grounds, Nyāya could argue that, for example, a lump of clay is best understood as part of the earth, which is a whole, and whose producthood extends to its structured components.

Counterbalancing arguments. As I noted above, regarding the problem of evil, I would prefer to simply note the Nyāya response than engage in detailed critique, as it tends to lead away from the epistemological issues with which I am most concerned. Other counterbalancing arguments, particularly the charge of impossibility of an unembodied being's creating anything, will be considered below, in the context of analogical or inferential failure.

Breach of legitimate inductive boundaries. To my mind, Nyāya wins this aspect of the debate. First of all, I find Vācaspati and Udayana's argument that the godlike status of the maker is only invoked *after* it has been established that the earth, etc., does indeed require agency, to be compelling. This move effectively blocks Dharmakīrti's contention that an illicit *sādhya* is being imported into the familiar *vyāpti* between worldly products and worldly makers. Furthermore, I think that Vācaspati and Udayana succeed in their attempt to

establish that the principle of *pakṣa-dharmatā-bala* is part of our common inferential practice. We commonly do employ inference to the best explanation in order to fill out the particular details of inductive inferences.

In this context, we may note that the Buddhist Ratnakīrti, while recognizing a legitimate role for *pakṣa-dharmatā-bala*, seeks to severely limit *its* scope.

> In response to [Nyāya's appeal to *pakṣa-dharmatā-bala*] I say: A special characteristic is indeed proven through the force of being a property of the site of the inference, but not all [special characteristics are so proven]. This is because the characteristic that can be proven is that without which the reason property's location in the site of the inference could not occur—just as in the case of fire, the special characteristic is "being present on the mountain" and not "as beautiful as a five-colored crest jewel." (Translation in Patil 2009: 165)

Ratnakīrti argues that the *only* special or new property that may be inferred about the probandum property by means of *pakṣa-dharmatā-bala* is the fact that it qualifies the inferential subject (e.g., "being present on the mountain").[69] But this restrictive account also seems to militate against common inferential practice. Consider the following example: By induction, an anthropologist infers that the footprints of type T in rock strata *y* are humanoid, since the footprint is qualified by properties which are reliable indicators of human feet. But she fills out the particular details of the specific humanoid (migratory patterns, likely diet, etc.) according to what would be required for it to be in a position where it could leave such

[69] Patil 2009: 166. In fact, he calls Nyāya's argument a "trick" insofar as it relies on a general connection between common artifacts and common makers to infer a unique kind of being.

footprints. To use Ratnakīrti's own locution, by appeal to "that without which the reason property's location in the site of the inference could not occur," she notes that the humanoid in question must have had certain properties in order for it to leave its footprints in the particular rock strata it did.[70]

To deny this principle would delegitimize a great deal of standard, well-tested epistemic practices. I think that this is what motivates Vācaspati's claim that in ordinary life, we do not need to experience directly the correlation between each class of products (chairs, spoons, carts, mansions, etc.) which we consider invariably connected to makers (as claimed by Ratnakīrti and others). Rather, we have a general notion of the concomitance between producthood and makerhood, which we refine according to the requirements of the individual inferential case. Both the denial of the principle of *pakṣa-dharmatā-bala* and the severe restriction upon it proposed by Ratnakīrti stifle our natural (and epistemically praiseworthy) tendency to modify our inductive generalizations to respond effectively to new types of circumstances.[71]

To his credit, Hume was himself wary of this problem, despite his appeals to the boundaries of induction and analogical reasoning. In *Dialogues Concerning Natural Religion*, Part 3, he has Cleanthes, a staunch advocate of natural theology, provide the case of the angelic voice.

> Suppose, therefore, that an articulate voice were heard in the clouds, much louder and more melodious than any which human art could ever reach;

[70] A more colloquial example: Upon arriving at my office the day after a late night of work, I find that my books were removed from the bookcase and replaced at random. I infer that some person or persons were in my office while I was gone. But for that to be the case, the person(s) must have had various other properties, including (i) being small enough to fit in the door (we can assume that the door is fairly small and is the only entrance to the office), and (ii) having functioning limbs by which they could have removed and replaced the books in the shelf.
[71] See Jayanta's treatment in *NM* (Varadacharya ed. 1969: 495; Trans. in Bhattacharyya 1978: 408-9).

suppose that this voice were extended in the same instant over all nations, and spoke to each nation in its own language and dialect: suppose, that the words delivered not only a contain a just sense and meaning, but convey some instruction altogether worthy of a benevolent being, superior to mankind: could you possible hesitate a moment concerning the cause of this voice? And must you not instantly ascribe to it some design and purpose? Yet I cannot see but all the same objections (if they merit that appellation) which lie against the system of theism, may also be produced against this inference. (Hume 1990: 453.)

If inference is categorically unfit to produce veridical cognition of an agent capable of doing what is required to produce such an effect (and thus having the properties concomitant of the capability), then what to do in this case? Would it be more rational to simply ignore the uniqueness of the data at hand and infer a speaker exactly like those of common experience? To withhold belief entirely?

Problems of closure. Nyāya argues that the existence of a single God-like being is the best explanation for the *producthood* which qualifies things like the earth. One problem of the argument is the extent to which the principle of *lāghava*, simplicity, is required to rebut polytheistic challenges. Theoretical simplicity may be a tie-breaker between theories whose explanatory power or epistemic standing is fairly equal. But here, one would hope for more than mere simplicity as a response to the challenge of multiple creators or a single, less godly creator. Classical Vedāntic theists reject Nyāya's design argument on these grounds. They offer two primary reasons. First, common experience holds that large building projects are handled by a number of individuals in concert. This suggests a putative *vyāpti* between large products and a plurality of makers, which requires more than an appeal to simplicity to

be rebutted. Second, they charge that Nyāya has not discharged complexity; they have simply shifted its locus. A single God-like being is numerically simple, but is qualitatively far more complex than a collection of more limited creator beings.

Though it does not develop a sophisticated theology of God's simplicity (like that, for instance, of Aquinas), we see that Nyāya has some affinity for this notion. It argues that God is an unembodied being whose awareness of the spatio-temporal expanse of reality is a single cognition (and correspondingly, whose making and governing the cosmos is a single act).[72] God's power and cognition are *svābhāvika*, part of his essential nature. Even if such simplicity were ceded, however, the "shifting complexity" objection is that a multitude of makers with limited power and strength is less theoretically burdensome than a single maker with cognitive power and strength which outstrips our comprehension.

Both of these challenges are strong, however. Earlier, we noted that Vyāsa, (commenting on YS 1.23) has argued that even if there were a plurality of makers, the most powerful may be deemed God proper. This response's shares a weakness with other "range of power" style arguments. The most powerful of the gods (e.g., Zeus) need not possess the power to be the singular maker of heaven and earth who corresponds to the God of classical theism. To the agree that some Naiyāyikas are willing to cede some of God's power to allow for suffering in the sense that he cannot change the workings of karma, they may not mind the notion of a very powerful, but not all powerful creator God. Still, there may be a fairly wide gap between such a divinity and the God of traditional theistic religion.

In this context, I should note that there was nothing like a "Nyāya religion." Naiyāyikas tended to be members of established worship traditions (mainly Śaivites and a

[72] In relation to this, an important (and tendentious) assumption by Nyāya is that creation occurred as a single act requiring expansive power and cognition. Problems with simultaneous creation are noted by Kumārila and Prabhākara. Jhā 1974 provides good summaries of their arguments in support of gradual creation and modification of the world by non-godlike agents.

handful of Vaiṣṇavas, as far as we can tell). I think a case can be made that Nyāya wants to argue for a "minimalist theism" which may be appropriated and modified by members of other schools. To this end, they may not be as concerned with the details of God's nature as much as the existence of a creator God who has, at the least, extensive power and cognition.

To conclude, although much of its argument is commendable, I do not think that Nyāya has the resources to establish with necessity the existence of a single *Īśvara*-like being, owing to the challenges of closure. Granting the reasonableness of extrapolating beyond the relata of common *vyāptis* between products and makers, by its own lights, Nyāya has not established definitively why we need only one maker as opposed to many, non-godly makers. They have, however, illustrated that it the producthood of various elements in the cosmos suggest some kind of personal agency, which at the least adds support to the theistic hypothesis.

Chapter 5: Testimony and Testifiers: As Below so Above?

5.0 Testimony in Indian Tradition

Indian tradition has almost universally accepted the importance of testimony as a source of knowledge.[1] Even schools like Vaiśeṣika and Buddhism, which accept only perception and inference as *pramāṇas*, do not disavow testimony. They merely reduce it to a subspecies of inference.

Some early scholars of Indian thought, influenced by Enlightenment hostility toward authority, trust, and tradition, saw such esteem for testimony as an embarrassing defect. Consider the remarks of the eminent historian Surendranath Dasgupta.

> Śabda or word [testimony] is regarded as separate means of proof by most of the recognized Indian systems of thought excepting the Jaina, Buddhist, Cārvāka and Vaiśeṣika. A discussion of this topic however has but little philosophical value and I have therefore omitted to give any attention to it in connection with the Nyāya, and the Sāṁkhya-Yoga systems. . . Evidently a discussion of these matters has but little value with us, though it was a very favorite theme of debate in the old days of India. (Dasgupta 1922: 394.)

Happily, in recent times, the importance of testimony has been rediscovered by contemporary philosophers.[2] Accordingly, recent work on Indian philosophy of testimony

---

[1] Excluding, as usual, the Cārvākas, who claim that perception alone is a genuine *pramāṇa.*

[2] C.f. Coady 1992, Matilal/Chakrabarti 1994, and Sosa/Lackey 2006.

has stressed its value and interest to contemporary thought.[3] The scope of classical Indian philosophy of testimony was far-reaching and debates included the following topics: the nature of and mechanism behind the denotative power of words and statements, secondary and tertiary meaning, the fundamental bearers of meaning within language, whether testimony is reducible to more fundamental *pramāṇas*, and the necessary conditions for testimony, testifiers, and those who gain knowledge through someone else's words. This chapter will have a fairly narrow focus. Our concern will be the conditions which must be met for legitimate occurrence of testimonial knowledge and whether these include a testifier who has knowledge of the content of his or her utterance. As will be seen, the classical debate over this question was interwoven with frankly theological concerns.

Much of this dissertation has examined attempts to develop epistemological theory in support of theistic claims. This chapter will illustrate a reverse movement, the modification of theological argumentation in light of epistemological progress.

5.1 Nyāya and the Centrality of the Testifier

The debate we will study pits Mīmāṁsā against. Nyāya. The parties in this dispute are entirely Hindus and are united in their acceptance of the legitimacy of Vedic revelation and tradition. In this debate, the explanandum is the authority of the Veda, and the debate is over the explanans, particularly whether a competent original testifier of the Veda is required to account for its authoritativeness. But the debate about scripture is informed by competing theories of testimony and the requirements for legitimate testimonial exchange. Mīmāṁsā contends that words may be informative and convey veridical information even if they are not the product of a knowledgeable testifier. More radically, in some contexts, they disavow

[3] C.f. Matilal/Chakrabarti 1994, Mohanty 1994, Ganeri 1999, and Dasti 2008.

the need for testifier at all. Conversely, Nyāya argues that testimony requires a knowledgeable, sincere testifier. Later, I will explicate the theological underpinnings of the debate, but for now, we need remember only that Mīmāṁsā's epistemological program stems from a desire to defend the centrality of the Veda, conceived of as an eternal, maximally authoritative collection of authorless injunctions and supporting explanations.[4] While the notion of authorless testimony is perhaps a bit hard for us to countenance, it may help if we keep in mind that Mīmāṁsā also conceives of the universe as eternal. They are committed to the notion of the beginninglessness of the world and the Veda. As each person has parents, so too does each generation of Vedic scholars have its teachers, who in turn had theirs, stretching back through infinite time. Nyāya also accepts the Veda as sacred testimony. Its commitment to the requirement of a competent testifier leads them to argue that the validity of the Veda is due to God (*Īśvara*)—the best of reliable testifiers—being its original speaker.

The basic positions in the debate were established quite early. *Nyāya-sūtra* 1.1.7 defines testimony as "the assertion of an authority." This is a translation of the Sanskrit compound *āpta-upadeśa*. Sanskrit compounds, like ours (e.g. "firehouse", "shantytown", "football"), generally do not make the syntactic relationship between the two words explicit. Philosophical commentary must, therefore, gloss the exact meaning of such words should they be objects of dispute. In his commentary on this text, Uddyotakara has his Mīmāṁsaka interlocutor argue that the compound is best analyzed as "an authoritative statement" (*āptaḥ upadeśaḥ*), on the grounds that some statements may be informative without conveying the content of a speaker's cognition.[5] Uddyotakara retorts that the term is rather to be understood as "the statement (*upadeśaḥ*) of an authority (*āptasya*)", the standard Nyāya view. Regarding

---

[4] See Appendix A. Also see D'sa 1980: 105-116

[5] Kumārila makes a similar argument in the second chapter of his *Ślokavārtika*.

the Veda, Nyāya-sūtra 2.1.69 itself states, "The Veda is authoritative (*prāmāṇya*) like *mantras* and medical science, owing to the expertise of their authors.[6]

5.2 The *Belief View of Testimony*: a Contemporary Analogue

A contemporary philosopher whose work intersects closely with our debate is Jennifer Lackey. Her work is not intended to engage with classical Indian thought, but is relevant for two reasons. First, her characterization of a similar issue within contemporary analytic thought helpfully frames the debate and I will therefore appropriate some of her terminology in my discussion. Second, the very example she uses to support her argument was first used by Gaṅgeśa in his attempt to settle the Nyāya-Mīmāṁsā controversy over the role of speaker belief in testimonial exchange.[7] It is his deployment of this example that will concern us in ensuing sections of this chapter.

A brief summary of Lackey's (2006b) argument: A dominant contemporary attitude toward testimony is the *belief view of testimony*.[8] In the *belief view*, statements are merely vehicles for the transmission of belief content from speakers to hearers, with beliefs being the central bearers of epistemic significance. Therefore, if person A's belief in *f* is unjustified, belief *f* is unjustified for person B, should she acquire it through A'*s* testimony that *f*. Though Lackey (2006b) does not explore the motivations for the *belief view*, I should note that it gains support from the concern that sources of knowledge should be connected to the truth in an intimate way. If my informant is an irresponsible believer who happens to get

---

[6] *mantra-ayurveda-prāmāṇyavac ca tat-prāmāṇyam āpta-prāmāṇyāt.*

[7] To my knowledge, Lackey is not aware of Gaṅgeśa's argument as she has not mentioned it or cited it as an influence. The earliest mention of Gaṅgeśa's argument in English is, to my knowledge, found in Potter 1992: 63-4. It is also briefly discussed by Chakrabarti in his introduction to Matilal/ Chakrabarti 1994.

[8] Lackey cites Fricker 1987: 68, Plantinga 1993b: 86 as paradigmatic instances of the *belief view*.

lucky, and shares her true belief with me, it seems that the belief I have gained from her testimony, though true, should not be deemed justified. It was a lucky accident, not a deep tie to truth, which generated the true belief in question. My testimonially generated belief would not, therefore, be knowledge. It would be true belief which accidentally hit the mark. Audi (2003: 137-8) provides a characteristic expression of the idea: "Testimony can give knowledge to its hearers only under certain conditions. If I do not know that the speaker at yesterday's conference lost his temper, you cannot come to know it on the basis of my attesting to it. . . *What I do not have, I cannot give you*" (emphasis is mine).

Whatever the merits of its motivations, Lackey provides a sustained attack on the *belief view* with an aim to supplant it with the *statement view of testimony*. The latter is the position that statements themselves are epistemically central for testimony, not beliefs. Her strongest argument employs the *consistent liar* counterexample. This involves a woman whose compulsion to lie about certain kinds of facts is—unbeknownst to her and thanks to a compassionate neurosurgeon—matched up perfectly with a systematic failure of her cognitive faculties. She thus lies only about things which she misperceives in such a way that the two combine to make her an extremely reliable testifier about *x*, despite her extreme unreliability as a believer about *x*. Knowing her to be a reliable testifier, her friend (who does not know of her condition) is epistemically responsible in accepting her testimony that there was an animal on the local hiking trail. He thus gains testimonial knowledge from her. These considerations demonstrate that it is not necessary for knowledge producing testimonial exchanges to involve belief transfer from a speaker to a hearer. Lackey (2006b: 86) concludes, "The statements of speakers are *not only the basis, both causally and epistemically, of the beliefs that hearers acquire via testimony, they are also the bearers of epistemic significance.*"

Lackey's argument is compelling. She identifies an influential conception of testimony only to reveal its fundamental weakness. It is fitting that she uses the example of a deluded liar to do so, since, as mentioned above, that very example was used by Gaṅgeśa to make a similar point among classical Indian epistemologists. This earlier incarnation of the deluded liar will be discussed shortly. We may note that insofar as early Nyāya requires successful testimonial exchange to stem from a speaker's own veridical apprehension of the facts conveyed, it is analogous to the *belief view* discussed above. The fit is not perfect; Naiyāyikas do not speak of belief transfer. Nevertheless, as testimonially produced knowledge is said to depend upon the speaker's own knowledge and sincerity, it agrees with relevant features of the *belief view*. Therefore, qualifications aside, in this chapter the early Nyāya position will be understood as a type of the *belief view*.[9] Likewise for Mīmāṁsā and the *statement view*.

5.3 From Testimony to Testifier: An Argument from Veda to God

In Chapter Four, we noted an argument in Udayana's *Ātmatattvaviveka* which supports the veracity of the Veda in the following way.

1. A maker of the universe exists. (From *kāryatva*).
2. The maker is omniscient (and, it is implied, benevolent). (From *pakṣa-dharmatā-bala*).

[9] Though he does not claim that it is explicit in the original sources, Ganeri (1999: 79) argues for a model of testimony which seems akin to the *Belief View* as making the best philosophical sense for Nyāya.

3. The maker is the being who authored the Veda.[10]
4. (Implied premise:) the knowledge and sincerity of a speaker ensure the veridicality of testimonial utterances.
5. (Therefore:) The statements of the Veda are veridical.

This argument is not ubiquitous in Nyāya. Rather, like many Hindu traditions Nyāya takes the authority of the Veda as something which tends to explain or justify other beliefs, not something whose status is particularly dubious or tendentious. To understand this, it is useful to remember the pervasive influence of the Veda and Vedic culture (understood broadly) on Hindu culture. The Vedas and Upaniṣads, the Epics and treatises which saw themselves as expanding upon Vedic thought, and the *Vedāngas*, or auxiliary literature, including works on medicine (*āyurveda*), grammar (*vyākaraṇa*), and astronomy/astrology (*jyotiṣa*) exhibited much cultural authority in classical India. Vedic literature, broadly construed, was considered a kind of voluminous handbook to the workings of the universe, and the sacrifices which they enjoined were the key means for mankind to gain desired ends of life. Thus, the Gītā:

> In ancient times, having created mankind along with the tradition of sacrifice, the Lord of beings said "By this sacrifice you will flourish. Let it bestow your desired goods." (3.10)

---

[10] A summary of Jayanta's argument to this effect:

> Is He who creates the Vedas the same as He who creates the world? Yes, since they are created for human beings who inhabit the world, so that those beings may improve themselves by the study of the texts. Only a creator who is all-knowing and understands the working of this mechanism because He created the world and the bodies in it would have the requisite knowledge and capacity to create the texts whose study has these results. (Potter 1977: 377)

A presupposition of many Hindus was, therefore, that the Veda and allied literature had given solid guidance and direction for countless generations. A number of Udayana's arguments for the divine authorship of the Veda, provided mainly in his *Nyāyakusumāñjali*, take the fact of their wide acceptance, evinced by the widespread respect given them, to indicate an authority that the statements of ordinary persons lack.[11]

We have seen that Mīmāṁsā does not think the injunctions of the Veda require support by authoritative speakers. In fact, much of its anti-theistic argumentation (as seen in Chapter Four) is motivated by a desire to avoid attributing the authority of the Veda to a God-like being. As noted by Uddyotakara, the Mīmāṁsā tradition contends that at least in some kinds of testimony, the positive epistemic status of statements is not due to a transfer of the positive status of beliefs they convey. Kumārila characterizes Vedic testimony as producing cognitions "not born from the statements of an unreliable speaker" (*Ślokavārttika*, codanā section, 185). The negative definition allows incompetent speakers to undermine testimony without requiring a competent speaker to ground it. [12] In the background of the Mīmāṁsā account is the notion of intrinsic veridicality (*svataḥ prāmāṇya*; see appendix A). Śabara argues that testimonially generated cognition is provided with default entitlement simply due to its producing an awareness of content (*avabodhayati*). This indicates a kind of default and challenge methodology, in that the mere deliverance of an undefeated contentful

[11] I should note that Nyāya, like Vedānta and Yoga, pays far more attention to the teachings of the Upaniṣads than the ritual portion of the Veda.

[12] Some Mīmāṁsakas, like Prabhākara, have a dual view of Vedic and human testimony. The former is understood according the *statement view,* while the latter are understood according to the *belief view.* Kumarila denies such a distinction, though he notes that the veridicality of human testimony is due to having an epistemically faultless testifier, whereas the Veda is veridical due to having no testifier whatsoever whose faults and errors could undermine it. A crucial question is whether, in cases of ordinary testimony, he defines a speaker's authority as stemming from his or her combination of accurate beliefs and sincerity. As D'sa (1980: 188) notes, Kumārila says little about what a good testifier's virtues are, though he argues that such virtues, whatever they may be, only serve to block defects and do not play a positive role in the production of veridicality. See *Ślokavārttika*, codanā section, 62-6.

cognition is enough for entitlement.[13] Such prima facie entitlement counts as justification, so long as it is not is vitiated by undercutting cognitions or awareness of epistemic faults of various kinds. [14] Their philosophy of testimony therefore combines the doctrine of intrinsic veridicality with an early formulation of the *statement view* of testimony.

As noted above, Nyāya, holding the *belief view*, moves in a very different direction. The authority of the Veda becomes a reason to infer the existence of a testifier, an über-testifier, identified with *Īśvara*, the creator of the manifest world, who is also the original convention-setter for linguistic usage, and the author of the Veda. There are a number of arguments which develop this theme, and Udayana provides many of them. By my count, he offers 12 separate arguments which focus on the need for God to account for linguistic usage in general and the Veda in particular.[15] Particularly relevant is the argument from authoritativeness (*pratyayāt*):

> The scriptural tradition requires positive epistemic excellences (*guṇa*) in its cause, since it has the character of a *pramāṇa*, like perception, etc.[16]

There are two claims which are central for the argument from authoritativeness. First, scriptural tradition has the character of a *pramāṇa*. To support the authoritative character of the Veda, Udayana notes that the scriptural tradition is accepted by a vast multitude of

---

[13] My understanding of this is influenced by Arnold's (2005: 57-111) defense of *Parthasarathi Miśra's* interpretation of intrinsic veridicality.
[14] *Ślokavārttika*, codanā section, verses 47-81; Śabda section, verse 53. The doctrine of intrinsic justification is defended with a regress argument coupled with an argument from simplicity. In short, if the regress must be stopped at some point by an intrinsically-justified cognition, why not stop with the initial one? It provides *prima facie* entitlement, which may be undermined, but need not be supported by any other cognition. See *Ślokavārttika*, codanā section, 49-51.
[15] In the famous 5th Chapter of NKM. See Dravid 1996: 369ff. Chemparathy 1972: 86-148 provides succinct summaries of Udayana's arguments of the 5th chapter.
[16] *āgamasampradāyo 'yam kāraṇaguṇapūrvakaḥ pramāṇatvāt, pratyakṣādivat.*

persons (*mahājana-parigraha*).[17] As noted, the Vedic tradition was very influential in classical Indian culture and was for many a basic source of information concerning various aspects of human conduct, especially religion and morality. Udayana suggests that it is akin to perception and other *pramāṇas* in that it is an irreducible, trusted source of information. He further argues that such enduring, ubiquitous trust (*samāśvāsa*) would not exist if the cognitions produced by the Veda were not veridical. Indeed, he later argues that it is implausible to think that the large majority of people would be deluded in a matter of such consequence. His idea is that if the Veda failed to guide people well, they would have, over time, lost faith in it.

Moreover, as the Veda teaches about the relation between earthly conduct and future rewards and punishments, it must be the product of a being that has cognitive access to such trans-mundane realities. That being, claims Udayana, is God. I don't intend to spend much time considering the philosophical merits of this part of the argument. It seems clear to me that the acceptance of a knowledge source by a large number of people is not a conclusive (or even reliable) indicator of *pramāṇa*-hood. We need only consider a case where, for example, the verdict of contemporary science genuinely conflicts with a popular scripture of some kind, or where two popular scriptures disagree with each other, in order to see the problem with wide acceptance as a prover (*hetu*) for something's being a *pramāṇa*. In any of the above cases, least one side is wrong, and yet both views are accepted by large masses of people. That said, wide acceptance would be a good reason to confer a putative knowledge source with default positive status in the absence of defeaters.

As an aside, we may note that other arguments for the authority of the Veda appeal to its effectiveness in guiding its followers toward observable success. NS 2.1.68 claims that

---

[17] This locution may be interpreted as "acceptance by great people" or "acceptance by a large number of people." Chemparathy (1972:97 n158) notes that Udayana consistently uses the phrase in the latter sense.

like mantras and medicinal prescriptions, the Veda is seen to be effective in regards to worldly matters. Given this, commentators argue, we may trust that it is also provides effective guidance in transcendent matters as well.

The second claim, that a *pramāṇa* involves a special excellence (*guṇa*) as part of its causal ancestry, is closer to the concerns of this chapter. *Pramāṇas* are commonly described as mechanisms which cause veridical cognition. When causal conditions effect a genuine *pramāṇa* token, they are said to possess excellences (*guṇas*), which are favorable causal conditions, and said to be bereft of faults (*doṣas*) or pernicious causal conditions. The presence of the latter would engender a *pramāṇa-ābhāsa*, a pseudo-*pramāṇa.* [18] In Nyāya's version of the *belief view*, an excellence which is required for the production of legitimate testimony is the speaker's veridical cognition(s) of the content of her utterance. The above argument therefore deploys the *belief view* in a remarkable way. In ordinary testimony, we commonly reason from true testimony to informed testifiers. So too should we reason from true scriptural testimony to a knowledgeable testifier, whose nature is such as to account for the expansive, authoritative, trans-mundane character of the Veda. Nyāya's move in this direction accords with its strategy of principled extension of the *pramāṇas,* akin to what we have already seen in the cases of perception and testimony. Commenting on NS 2.1.68 (ND 570), Vātsyāyana remarks that "the Veda is authoritative because it is produced by an

[18] The motivation for the Nyāya treatment of excellences and faults may be interpreted in two ways (which will be mirrored in our discussion of causal irrelevance below). On one reading, it is primarily metaphysical and only derivatively used for the purposes of epistemic certification. Alternatively, its primary purpose is the attempt to identify key factors in successful cognition-generation to offer guidance in epistemic justification, with the analyses of causality supporting that aim. In support of the first interpretation, it should be noted that many of the cited instances of excellences and faults are neither introspectable nor easily investigated. This suggests that the primary role of excellences and faults is metaphysical and that their epistemological role—as entities which are to be investigated when required to certify or de-certify a putatively veridical cognition—is secondary and derivative. In support of the second interpretation, which takes qualities and faults primarily to be objects of investigation for epistemic certification, Stephen Phillips (personal communication) has argued that the terms "*guṇa*" (quality) and "*doṣa*" (fault) are normative, and as such they suggest a connection to epistemic evaluation.

authoritative person. In this regard it is the same as ordinary testimony."[19] In this case, if Vedic testimony is akin to ordinary testimony, it too needs a competent author. But such a speaker would be very unlike those of common experience.

5.4 Gaṅgeśa's Rejection of "Utterer Conditions" on Testimony

Though the Nyāya view described above was standard in its early period, we will now consider the factors which led Gaṅgeśa to reject it, denying that what Mohanty (1994: 31-33) calls "utterer conditions" are excellences required for the production of veridical testimonial cognition.[20] The relevant discussion takes place in the first chapter of Gaṅgeśa's *Tattvacintāmaṇi*.[21] Here, the question driving Gaṅgeśa is whether the mere absence of epistemic faults is enough to ensure veridicality, or must there be positive epistemic excellences as well? The former position is defended by a Mīmāṁsaka. Gaṅgeśa and others, whom he casts as fellow Naiyāyikas, defend the latter position.[22]

In this context we find an examination of testimony. The main issue focuses on various causal conditions purportedly involved in the production of veridical testimonial cognition—particularly the traditional Nyāya position that an accurate cognition of the subject matter by the speaker is among the qualities required for the production of a hearer's

[19] *āpta-prāmāṇyāc ca prāmāṇyam laukikeṣu śabdeṣu ca etat samānam iti.*

[20] Mohanty identifies three sets of conditions Nyāya traditionally requires for veridical testimonial exchanges: (i) utterer conditions (e.g. those three mentioned by Vātsyāyana above), (ii) linguistic conditions (that the words are syntactically and semantically well formed and contiguous) and (iii) understanding conditions (that a hearer apprehends the proper linguistic conditions, and has the ability to "unify the component meanings into one related meaning").

[21] See Phillips/Ramanuja Tatacharya 2004: 177-193 for the passage in its entirety.

[22] Gaṅgeśa writes in the form of a dialogue between among competing camps, and steps in to pronounce and defend his conclusive judgment on the matter at hand. Often he does not explicitly identify which camp is being represented in a given passage, and, like other classical Indian philosophers, leaves it to the reader to perform philosophical forensics as they parse the text.

veridical testimonial cognition. Gaṅgeśa begins by noting that this claim has been used to argue for the existence of God.

> As veridical cognitions are produced by the presence of excellences, in respect to the Veda veridical cognitions are produced by the excellence of a speaker's having the veridical cognition of the meaning of the utterance. From this, *Īśvara* is established as the support of the statements of the Veda.[23]

A representative of Mīmāṁsā is made to disagree.

> If the veridicality of the Veda can be explained by the thesis that it is eternally free of faults, as is witnessed (by us), then we are not to imagine am omniscient being (as the author of the Veda) whose cognitions are eternal, etc., (as all) *un*witnessed (by us), since such is (theoretically) cumbersome. (Modified translation by Phillips/ Ramanuja Tatacharya 2004: 178.)

Gaṅgeśa then considers traditional Nyāya arguments for the *belief view* to the effect that mere absence of faults is not enough to ground veridical testimonial exchange:

> It is (i) more theoretically elegant (*lāghava*) to consider a speaker's cognition of the facts expressed by his utterance to be a primary causal factor [for successful testimonial exchange], since mere absence of faults like the speaker's being mistaken is causally irrelevant (*anyathā-siddha*). And (ii)

[23] *evam pramāyāḥ guṇa-janyatvena vede 'pi pramā vākyārtha-yathārtha-jñāna-guṇa-janyā iti tad-āśrayeśvara-siddhiḥ.*

> even if epistemic faults are absent, without [a speaker's] cognition of the facts conveyed by it, there would be no [impetus for] a corresponding statement.[24]

The first salvo by the Nyāya defenders of the *belief view* invokes the charge of causal irrelevance (*anyathā-siddhatva*), a theoretical consideration which dominates this discussion.[25] It is motivated by the need to isolate the most relevant causal factors within a bundle of causal conditions (*karaṇa-sāmagrī*) that produce an effect. The charge of causal irrelevance is applied to elements that are deemed too distant in an analysis of the effect. Such irrelevance may be metaphysical or epistemological. In cases of metaphysical irrelevance, something may be commonly present in a type of causal nexus, but is strictly unnecessary. Phillips glosses Gaṅgeśa's above usage in this very way: "a testimonial veridical cognition could occur while an error on the part of the speaker or the like occurred, too."[26] Epistemological irrelevance involves factors which are necessary conditions for the causal event, but are considered irrelevant for the purpose of analysis. *Nyāya-sūtra* 2.1.20-6 illustrates this, noting that among the casual factors which must be specified in an analysis of perception, the existence of time and space need not be included as they are common to all kinds of events. These considerations are somewhat pragmatic. We have limited time to understand the world and therefore it is reasonable to neglect factors which are too far upstream from the causal event. The charge of causal irrelevance is therefore cited in order to direct attention to the most relevant "local" causal factors. Gaṅgeśa, still representing Nyāya tradition, drives the charge of irrelevance home with a now-familiar example.

---

[24] *tatra lāghavād vākya-artha-yathā-artha-jñānasya hetutvena bhrama-ādi-abhāvānām anyathā-siddhatvāt. āptasya bhrama-ādi-abhāva-mātrena vākya-artha-jñānaṁ vinā tādṛśa-vākya-abhāvac ca.*
[25] For a clear treatment of causal irrelevance, see TS §41.
[26] Phillips/Ramanuja Tatacharya 2004: 178.

> An absence of defects is itself absent in some sources of veridical cognition like the claim "It's a pot" by a deluded liar (*bhrānta-pratāraka*), or the statement "It's a piece of cloth" which is born from testimony beset with some faults but which [nonetheless] accords with reality.[27]

Here we see the entrance of the deluded liar example. It is employed to illustrate the fact that veridical testimony sometimes occurs despite the presence of various testimonial defects like a speaker's desire to deceive. Similarly, an irregularity in the production of a tool used in the making of a pot need not show up in the pot effected. This indicates that the absence of certain defects is causally irrelevant (in the metaphysical sense) to veridical testimonial exchange. Even if such defects are present at some distance in the causal chain, veridical testimonial cognitions may be produced.

Though the deluded liar shows up as a friend to the traditional Nyāya position, he will soon lead to its demise. In the meantime, recall that Gaṅgeśa's Naiyāyika is also committed to the position that there would be no impetus for testimony without an original cognition of the speaker, whose content she wishes to impart. The upshot of this is that it is constitutive of testimony that it be impelled by a speaker's previous veridical awareness of the fact(s) conveyed by her statement. In other words, a speaker has cognized something and wishes to share the knowledge gained with another through testimony. The representatives of Nyāya offer various articulations of this claim within the text.

Gaṅgeśa frames the above objections in such a way as to highlight tensions within the traditional Nyāya view of testimony. Historically, Nyāya endorses a something akin to a

---

[27] *bhrānta-pratāraka-vākye ghaṭo 'sti iti vākye paṭo 'sti iti doṣa-janya-vākye ca saṁādāt pramāṇe tad-ābhāvāc ca.*

correspondence theory of truth. Yet, as Nyāya endorses a variant of the *belief view*, it considers a speaker's veridical cognition of the facts conveyed in his statement an epistemic excellence *required* for successful testimonial exchange. The two come apart in the case of the deluded liar. The liar's testimony accords with reality, yet it is not produced by her own veridical cognition. Gaṅgeśa provides another example involving a parrot which repeats a statement conveying accurate information, which is taken to be a human testifier by someone listening in another room. Successful testimonial exchange may therefore occur in the absence of a speaker's veridical cognition of the meaning of her statement.

A second locus of tension is the question of theoretical elegance (*lāghava*), which, as mentioned above, is a paramount consideration for Nyāya's judgment of competing theories. Elements within a theory are deemed causally irrelevant if they are unnecessary or unimportant members of the causal nexus which produces the effect under scrutiny. Given its stated concern with theoretical elegance, it would seem that focusing on the mental states of the *speaker* is the wrong move for Nyāya, as it moves away from the central factors in testimonial cognitions, the status of the *hearer* and *her* beliefs. Accordingly, Gaṅgeśa has the Mīmāṁsaka retort,

> How could a statement from a parrot or a mistaken liar be a source of veridical cognitions for *you* either? They are not produced by means of an epistemic excellence. And since they accord with reality, you cannot claim that these statements are not sources of veridical cognition, [due to their] lacking an excellence and not expressing the intention of the speaker.[28]

[28] *nanu tava api śuka-ādi-bhrānta-pratāraka-vākyaṁ kathaṁ pramāṇaṁ, guṇa-ajanyatvāt. na ca guṇa-ajanyatvāt vaktṛ-tātparya-aviṣayatvāc ca tad-apramāṇam. saṁvādena sādhye bādhāt.*

We should note that the Mīmāṁsaka is being a bit hasty here. Instead of arguing that such statements are not produced by any epistemic excellence, this argument really amounts to the charge that testimonial cognitions are not produced by the specific quality in question, an accurate cognition of the meaning behind the utterance on the part of the speaker. Still, his fundamental point is on target. The Naiyāyika is trapped in a dilemma. He must either reject the requirement that a speaker accurately cognize the fact conveyed in her utterance, accepting the veridicality of testimonial cognitions produced by statements of deluded liars and the like, or he must disclaim such cognitions' positive epistemic status on purely technical grounds. What makes the latter option particularly difficult is that Nyāya traditionally holds that a fundamental test of cognition's veridicality is that it lead to success in action. Concordance (*saṁvāda*) between the testimonial cognition in question and one's later experience would only serve to validate it.

Gaṅgeśa takes this argument very seriously. Though he considers possible rebuttals from earlier Nyāya, he rejects them and concludes (in his own voice),

> Now we say this: in normal testimonial exchange, an accurate cognition of the meaning of an utterance *on the part of the speaker* is not an excellence required for veridical testimonial cognition. But, semantic fitness, etc. of the statement and a *hearer's* veridical apprehension of such are excellences. This view is (i) more theoretically elegant and (ii) required [to explain the data]. But, when owing to faults like error, inattention, or a speaker's desire to deceive, a statement does not accord with reality, a hearer does not have a

veridical apprehension of the said virtues and the meaning of the statement is nullified.[29]

Gaṅgeśa thus rejects that what Mohanty calls "utterer conditions" are excellences required for the production of veridical testimonial cognition. The primary conditions are linguistic conditions (properties of the statement) and understanding conditions (properties of the hearer). As this account focuses on the most relevant causal factors, it is more theoretically elegant, and it is required to account for examples like the deluded liar. Gaṅgeśa (joining Lackey) thus embraces the *statement view* and on this issue, agrees with Mīmāṁsā against early Nyāya.[30] Regarding the argument from Veda to God, he concludes that "It is not the case that the Lord is established on the condition that veridical cognitions from the Veda are produced of such excellences."

5.5 Possible Responses from Traditional Nyāya

There are two main avenues available for those Naiyāyikas (or Nyāya sympathizers) who wish to challenge Gaṅgeśa. First, they can deny high-grade positive epistemic status (whether "knowledge," "*pramāṇa*-born cognition," etc.) to the cognitions produced by a deluded liar. Second, they may accept such cognitions as perfectly legitimate, but take them

[29] *atra brūmaḥ. śabda-pramāyāṁ loke vaktur yathā-artha-jñānaṁ na gunaḥ, kiṁ tu yogyatā-ādikaṁ yathā-artha-taj-jñānaṁ vā. lāghavād āvaśyakatvāc ca. bhrama-pramāda-vipralipsā-janye vākye visaṁvādini na yathā-artha-yogyatā-jñānam, vākya-arthasya bādhitatvāt.*

[30] Later, in the fourth chapter of his *Tattvacintāmaṇi*, which focuses on testimony, Gaṅgeśa revisits the above cases as part of an anti-reductionist argument. A standard Indian reductionist argument is that testimonial exchange is fundamentally an inference from a truthful speaker's words to her veridical cognition. Her words convey her cognition, and if she is expert, her cognitions are generally true. Gaṅgeśa argues that since bits of knowledge gleaned from a deluded liar or a parrot are legitimate instances of testimonial knowledge, the argument that such knowledge derives from an inference from a speaker's words to his accurate awareness is undermined. See Bhatta 2005: 285*ff*.

to be generated from a knowledge source other than testimony. We will examine each response in order.

Naiyāyikas may want to argue that instances of the deluded liar and the accurate parrot are akin to Gettier cases, where a veridical and responsibly generated cognition hits the mark by means of a lucky accident, an unknown quirk in the world. As such it is denied the highest epistemic endorsement. Gaṅgeśa is well aware of such cases and discusses an inferential Gettier case in the section we examined above.[31] Ganeri (1999: 78) suggests that the Gettier strategy is an easy way for Nyāya to dispatch the deluded liar case: such a hearer has true, but unwarranted belief. In the language of Nyāya, the hearer would have a cognition which is veridical but not *pramāṇa*-born in the sense of a standard typable *pramāṇa*.

Gaṅgeśa, however, does not accept this strategy for the testimonial case, using the word *pramāṇa* for utterances which conform to reality, whatever the state of the speaker's mind. This harmonizes well with Nyāya's accounts of veridicality and of cognition-certification. As noted above, Nyāya defines a veridical awareness (*pramā*) according to something akin to a correspondence theory of truth. Gaṅgeśa's own definition of veridicality is "an awareness-episode with predication content F whose object is qualified by F." [32] Moreover, one key method to verify a contested cognition's veridicality is to examine whether it has provided good guidance in successful activity. These both tell against the Gettier interpretations, as a *consistent* deluded liar's words both correspond to the state of the world and guide successful action. Of course, to the degree that a liar's testimony is haphazardly connected with truth, her speech *in general* is not a *pramāṇa*. It is important to separate the case of a habitually deluded but accurate liar, as seen in Lackey, and a case of a

[31] Saha 2003: 59-70 and Phillips/Ramanuja Tatacharya 2004: 182, 188.
[32] *tadvati tatprakāraka-anubhavaḥ*. Phillips/Ramanuja Tatacharya 2004: 236.

one-time instance of testimonial knowledge from a liar who is not systematically deluded, but occasionally makes the mistake of telling the truth. Gaṅgeśa does not explicitly distinguish between the two. Still, given his position, he would accept that the relevant statement of Lackey's *consistent liar*, as heard by her responsible but uninformed friend, is a *pramāṇa.*

As the Gettier strategy seems unpromising, a second response available to traditional Naiyāyikas is that the speech of the deluded liar does produce knowledge, but not knowledge by testimony. This response has two aspects. First is the claim that it is constitutive of testimony that a speaker intends to share his own putatively veridical belief. A number of the Nyāya objections to the *statement view* which Gaṅgeśa cites amount to this charge.[33] This indeed seems reasonable for English speakers, in accord with common intuitions that testimony involves a speaker's intending to share putatively accurate information at her disposal (something like an "understanding and sincerity" requirement.) Both the deluded liar and parrot cases would then be excised from the ranks of testimony, since the content of their utterances is divorced from their awareness and intention. A deluded liar shares accurate information *in spite of herself* and a parrot has little or no access at all to the content of the statement which it repeats. The information shared by the deluded liar and the parrot would, therefore, be better understood as something like the information provided by non-agential mechanisms like clocks or thermometers. In such mechanisms, the content of the cognition generated is divorced from any intention to provide knowledge and is therefore not testimony.

The second part of this response would be to reduce knowledge produced by a deluded liar's testimony to a kind of inference. Nyāya understands inference (*anumāna*) to

[33] The basic notion is that without a (putatively) veridical cognition on the part of a speaker, there would be no impetus for testimony at all, though Gaṅgeśa mentions other variants of this idea. See Phillips/Tatacharya 2004: 178, 182, 190, 192.

have the following structure: an unseen target predicate (*sādhya*) is cognized by means of the cognition of a sign or mark (*hetu*) which has an invariable concomitance (*vyāpti*) with it. For example, the perception of smoke on a hill triggers inference of fire on the hill (the hill is qualified by fieriness). Regarding the apparent testimony of deluded liars, defenders of the *belief view* could argue that beliefs produced by the indications of reliable non-agential mechanisms are inferential.

Could this strategy work, given the relevant non-agency of the deluded liar or parrot, and the Nyāya theory of inference? It is doubtful that it could. This avenue does not look promising for Nyāya, since, given Nyāya's staunch anti-reductionism there is the danger that this argument would prove too much. If a strong case could be made that a deluded liar's testimony is really an instance of inferring from an observable indication to a target fact, it makes it harder for Nyāya to support the view that in normal cases of testimony, where the observable world is a double of the "deluded liar world," testimony is irreducible. From the epistemic perspective, both transactions are entirely the same. To put the point slightly differently, to the degree that Nyāya's anti-reductionist arguments succeed, they would also prove that the deluded liar and the parrot, if anything, are providing testimonial not inferential knowledge.

5.6 The *Pure Belief* View

This section will return to contemporary philosophy of testimony and provide a positive view, inspired by Gaṅgeśa and Mīmāṁsā. Above, a representative of traditional Nyāya suggested that it is constitutive of testimony that a speaker must sincerely wish to share a putatively veridical belief. In the paper discussed above, Lackey (2006b: 6, 27 n19) also considers a similar charge, responding that "testimony" clearly has a wider semantic range:

we use it to include instances of perjury, where there is clearly no intention of the speaker to share accurate information. This response is not very strong. "Testimony," as used in legal settings, is a term of art and does not necessarily capture fundamental intuitions regarding the concept expressed by the word. Compare the fact that contempt of court does not require the violator to act with "lack of respect accompanied by feelings of intense dislike."[34] Her deeper response consists of the claim that fundamental to testimony is the "intention to express *communicable* content," not the intention to express *accurate* content. Though she does not develop this requirement in the context of deluded liars, it supports her contention that the *consistent liar* indeed testifies as she at least intends to impart communicable content.[35] It seems that this places Lackey in an undesirable no-man's land, which may be illustrated by the following comparison regarding necessary conditions on testimony which have been discussed to this point:

Old Nyāya:	The production of veridical testimonial cognition requires a true statement, impelled by a speaker's intention to express a veridical cognition, which is understood by an epistemically responsible hearer.
Lackey:	The production of veridical testimonial cognition requires a true statement impelled by a speaker's intention to express communicable content, which is understood by an epistemically responsible hearer.
Gaṅgeśa:	The production of veridical testimonial cognition requires a true statement,

[34] Dictionary.com. *WordNet® 3.0*. Princeton University, *s.v.* "contempt" http://dictionary.reference.com/browse/contempt (accessed: June 21, 2007).
[35] Her primary motivation for the "intention to express communicable content" requirement is to steer a middle ground requiring some intention to share information on the part of the testifier, but little beyond this. It is meant to excise, for example, cases like someone's head-bopping to music, which is mistakenly understood as an assent to a question, while retaining cases where one's diary, never meant for public consumption, may be considered that person's testimony nonetheless. See Lackey 2006a: 187-9.

	which is understood by an epistemically responsible hearer.

Though Lackey rightly points out that we may distinguish between definitions of testimony which focus on the speaker, or which focus the hearer, Lackey holds that in both cases a speaker's intention to express communicable intent is required.[36] In this regard, she seems torn between conflicting intuitions. To the degree that she is influenced by the vestiges of the *belief view*, she maintains some "utterer conditions" on testimony. But to the degree that she is influenced by the *Statement View*, she wishes to minimize such requirements, allowing the content of the utterance to be divorced from the speaker's intention. The liar does not experience the facts conveyed by her speech, nor does she wish to convey them.

Inspired by Gaṅgeśa, I endorse what may be called the *pure statement view*.[37] Lackey's minimal requirement forces her to join with members of the *belief view* in excising certain kinds of putatively veridical testimonial cognition on purely technical grounds. For example, Gaṅgeśa explicitly accepts as testimonial a case where a parrot repeats veridical information, is heard by someone in another room, and is mistakenly taken to be a competent human testifier. Lackey cannot, as parrots lack the relevant understanding and agency to intend to express communicable content. Of course, Lackey may argue that in this case, a parrot functions like a tape recorder, merely repeating the words of a purposive agent. The case for the *pure statement view*, then, is more powerfully made by considering an analogue of her own example, which we can call *consistent robot*. A robot replica of the *consistent liar* is programmed to emit true auditory reports about local wildlife picked up by its sensors, but, as a robot, it lacks mental content. In this case it is not merely recording and replaying

[36] Lackey 2006a: 186-93.

[37] My thoughts on this have been informed by conversation with David Sosa and by his seminar on the epistemology of assertion.

the statements or input of its programmer or other volitional agents. And, though the same unknowing friend of the *consistent liar* would, in an epistemically responsible way, accept the robot's statements and be well guided by them, Lackey must categorize the beliefs produced as non-testimonial. Aside from the thorny question of what knowledge source she would reduce the true robot utterances to, Lackey's position now seems at odds with some of the motivations which make her view attractive. Consider that (i) an honest and competent testifier, (ii) a deluded liar, and (iii) a robot replica programmed to recite true statements may be indistinguishable from the hearer's perspective. The strength of Lackey's position is that unlike adherents of the *belief view* she need not reject the testimonial status of beliefs from situation (ii) on purely technical grounds. It seems that she may best be served by dropping her "intention to express communicable content" requirement, so she may similarly accept beliefs produced in case (iii) as well.

How would a defender of the *pure statement view* respond to the question of what knowledge source is operative when one learns for example, that it is 12:01 pm from a clock or that it is 82 degrees from a thermometer? I would argue that such cognitions are in fact testimonially produced. After all, the markings on a clock or thermometer are a kind of stripped down language which require both lexical and syntactic competence on the hearer's part. As such, they too are a sort of "knowledge from words."[38] Would a defenders of the *pure statement view* be committed to the paradoxical position that there may be testimony without testifiers? Well, yes, if "testifier," connotes something has experience with phenomenal character, is rational, etc. But the preceding argument is precisely intended to

[38] It is not beyond the resources of the Nyāya tradition to argue that clocks and thermometers, like books or recordings, carry the information provided by their maker, in this case, the engineer or designer who helped calibrate the instrument to convey accurate information, or from the person who recently reset them according to standard measurements. But, it still seems doubtful that, for example, the clock which I set is currently sharing *my* cognition that it is *now* 3:09 pm, since I don't currently know that it is 3:09 pm without looking at the clock. And indeed, the robot example is meant to expressly discount such a situation.

demonstrate that the scope of "testimonial generators" is wider than that of what are commonly thought of as testifiers. This is nicely captured by the Sanskrit term for testimony, *śabda*. *Śabda* means "word." And, in the end, this captures the insight of the *pure statement view.* What is distinctive about the knowledge gained by *śabda* is not that it must be produced by an agent's willful choice to share information, but that it is produced by a hearer's ability to understand language. The term "testimony" may obscure this fact.[39]

5.7 Conclusion

Returning to theological concerns, Gaṅgeśa's conclusion is that the epistemology of Vedic assertion need not be underwritten by a God-like knower of its contents. In this case, "what need is there", he asks, "to postulate the Lord?" The basic idea, of course, is that since a speaker's awareness of the facts contained in testimony is not in the end a necessary condition on testimonial exchange, one cannot use it as a wedge to argue for a super-testifier who produces the Veda. This argument represents what is, perhaps, an all-too-rare instance of doctrinal revision in the face of epistemological innovation. As opposed to the previous two chapters, which evinced epistemological innovation fueled by the desire to defend what may be called doctrine, or at least central metaphysical holdings, we now see that an important argument is jettisoned owing to genuine epistemological progress.[40] This being noted, Nyāya does hold that Vedic statements, primarily in the form of the *Upaniṣads*, attest that there is in fact a God-like maker of the cosmos. This is illustrated by Vācaspati's ending

[39] My views here been influenced by A. Chakrabarti 2000.
[40] I must underscore the fact that despite this rejection of a classical Veda-based argument for Īśvara, Nyāya does continue to hold that the testimony of the Veda itself does provide knowledge of God. That is, the statements of the Veda attest to the existence of God. Such is illustrated in Appendix C below, where Vācaspati Miśra cites the Veda in support of his natural theology. Thanks to Stephen Phillips for reminding me to emphasize this point.

his extensive rational defense of the existence of God with corroborating claims of Vedic scripture (*āmnāya*; see Appendix B).

Concluding Reflections

I'd like to close this dissertation with a few reflections on major themes and dialectical patterns which have emerged in our study. First, I think that we noticed the key strategies developed in a conflict between a kind of epistemic liberalism, represented by Nyāya and a conservatism represented by other thinkers, particularly Buddhists and Mīmāmsakas. It may sound funny or strange for Naiyāyikas to be spoken of as liberal. Indeed, they are commonly (and correctly) cited as the champions of a common-sensical, (even hard-headed), realism in classical India, which seeks to preserve pre-theoretical intuitions as far as possible. Besides this, as seen in Chapters One and Two, they are phenomenally and doxastically conservative as they start from an assumed trustworthiness of the putative deliverances of the *pramāṇas* and putatively veridical cognition. Indeed, for Nyāya, default trust is the best attitude to take in our cognitive lives.

Nyāya's liberality, I argue, primarily consists in what I have called the principled extension of *pramāṇas*, in order to defend the existence of core metaphysical holdings; in our particular study, the existence of God. In the case of perception, they argue that yogic experience is best construed as a non-ordinary perceptual state, and as such, it deserves the same epistemic privilege as ordinary perception. In inference, the principle of *pakṣa*-*dharmatā*-*bala* allows for the principled move from experience of the concomitance of ordinary artifacts and ordinary makers to a singular, extra-ordinary maker who is, for non-yogis, unobserved. In testimony, the principle that testimony requires a competent speaker, taken from ordinary experience, is applied to the sacred Veda, allowing for an inference to a supremely competent testifier who is identified with God.

In the first case, they are opposed by the conservatism of the Mīmāṁsaka Kumārila, who contends that perception is by definition the perception of common experience. As such, yogic experience is not perceptual and non-*pramāṇic*. Dharmakīrti and others argue that Nyāya's inference to God is too powerful and would allow for various sorts of inferential anomalies. Both groups of

opponents consider Nyāya's extension of *pramāṇas* to be impermissible. I think that Nyāya successfully rebuts, or at least has the resources to successfully rebut such charges, as seen in their defense of the principle of *pakṣa-dharmatā-bala*. This assertion must be qualified. By "success" I mean that Nyāya's methods are not shown to be irrational or *apramāṇika* by their own lights, not that Nyāya's arguments should compel opponents on pain of irrationality. In the final case, that of testimony, Gaṅgeśa agrees with Mīmāṁsā challengers that that an original testifier's true belief is a primary causal factor in testimony, and as such, rejects one influential form of the argument which moves from the authority of the Veda to the existence of God.

The conservatism vs. liberalism on display indicates the Nyāya's deep commitment to defending traditional theism and the religious values associated with the Veda and the Hindu culture. It also demonstrates epistemological innovation and subtlety befitting first-class epistemologists. Finally, it evinces Nyāya's commitment to rationality, construed as fidelity to the deliverances of the *pramāṇas*. I think that Nyāya, in contrast especially to Buddhist epistemological conservatism, could argue that it is better take fairly small epistemic risks for the gain of more knowledge, and that it is eminently reasonable to do so.

Another salient undercurrent we have seen is the role of *pramāṇa-samplava*, the convergence of *pramāṇas*. In Chapters One and Two, convergence of *pramāṇas* was a central feature of Nyāya's reflection upon disputed or doubted beliefs. If a disputed belief is supported by further *pramāṇas*, its status is secured. If later (and more compelling) *pramāṇas* conflict with the original cognition, its status is pressed into further doubt or outright rejection. In its overall case for *Īśvara*, Nyāya has recourse to the claim that by its lights, it has demonstrated *pramāṇa-samplava.* Through this, each *pramāṇa* serves to support and strengthen the deliverances of others, which may have been accepted on a default status. There may be loose analogy between this strategy and the so called "cumulative case" approach to natural theology, which attempts to "establish a conclusion by introducing a variety of diverse considerations" (Wainwright 1988: 166*ff*). Even if some individual

considerations are shown to be unconvincing, the idea is that in sum, the conclusion is that the theistic hypothesis is defensible.

Regarding Nyāya's theism, I would like to underscore the fact that there was no such thing as a Nyāya religion. Naiyāyikas tended to be devoted to particular deities as understood and worshipped in specific religious traditions, but in their theorizing, they argued for a minimalist theism. I suggest that they expected their findings to support a basic conception of the deity—what we may call "the God of natural theology"—that is amenable to appropriation by individual theistic traditions. With such a conception, they are able to appeal to the experiences of individual worshippers and thinkers in various traditions into a cumulative-case appeal to religious experience and expression.[1] The experience of a Śaivite and those of a Vaiṣṇava need not be seen as conflicting in the sense that they both support the baseline theism which Nyāya advocates as philosophically viable. Nyāya's baseline theism should, I hope, contribute to its relevance amongst philosophers and theologians from other contexts, times, and places and will thus prove to be of interest to philosophers of the Abrahamic and other theistic traditions.

[1] As illustrated in Udayana's opening appeal to the ubiquity of theistic belief in the *Nyāyakusumāñjalī*

Appendix A

Extrinsic vs. Intrinsic Determination of Veridicality

Nyāya champions a view called *parataḥ prāmāṇya* (extrinsic determination of veridicality). This is the view that the causal factors which give rise to a cognition are not adequate to provide definitive awareness of its own veridicality, except in certain special circumstances.[1] Admittedly, "veridicality" is not a completely lucid translation of *prāmāṇya*, but will serve our purposes.

Nyāya's position is usefully contrasted with the approach of Mīmāṁsā. Mīmāṁsā was both a rival and ally to Nyāya: a rival in many of the details of epistemological analysis, but an ally in respect to a shared metaphysical realism, acceptance of the Veda, and entrenched opposition to Buddhism. While both schools agree that putatively veridical cognitions are (at least) prima facie justified, they differ over the grounds of such status. Mīmāṁsā champions a view called *svataḥ prāmāṇya*, "intrinsic determination of veridicality." This is best understood as the notion that the same causal conditions which give rise to the awareness of cognition also give rise to awareness of its high-grade positive epistemic status. Keśava Miśra summarizes it thus: "intrinsic determination of veridicality

[1] Such circumstances include apperceptive awareness and certain kinds of inference. See Udayana's remarks in Dravid 1995: 324 and Gaṅgeśa's in Phillips/Ramanuja Tatacharya 2004: 76, 593-4, 600. See K.K. Chakrabarti 1984: 350-4 for a cogent discussion of exceptions to the *parataḥ* doctrine and their role in Nyāya epistemology. With one exception, these cognitions do not play a major role in Nyāya's justificatory schema, as they would for certain modern foundationalisms. The exception is the notion discussed by Vācaspati that confirmatory inference from successful action may be self-confirming. Vācaspati's claim that such an inference is *svataḥ* is controversial, as noted by Matilal (1986: 168-179), and Udayana softens the claim by arguing that the lack of doubt regarding such inference is contingent. To quote Matilal (1986: 170): "inference is not said to be indubitable here on *a priori* grounds: what is appealed to is only a practical impossibility (cf. 'contradiction of practice' = *vyāghāta*) of raising any doubt." Ganeri (2001: 166) suggests that such cognitions are, in principle, falsifiable, but "revision of these principles would catastrophically perturb the equilibrium of reflective justification."

consists of non-dependence [in the determination of veridicality] upon factors other than those which produced awareness of the original cognition" (*Tarka-bhāṣā* §20).[2]

Philosophers within both camps often use the above nomenclature (*parataḥ-prāmāṇya* and *svataḥ-prāmāṇya*) with various shades of meaning, and at times they seem to argue past one another.[3] But, the core issues in the conflict, it seems to me, are (i) the strength of the default epistemic status accorded to putatively veridical cognitions, (ii) the considerations, if any, cited to underwrite the status in question, and (iii) methods of demonstrating non-veridicality or blocking default positive epistemic status.

The foundation of the *intrinsic* position was laid by Śabara, the pioneering commentator on *Mīmāṁsā-sūtra*, who argues that Vedic testimony produces cognitions with default *prima facie* justification simply due to its producing (*avabodhayati*) determinate, contentful cognitions.

> There is self-contradiction involved in the assertion that "the Veda asserts, and asserts what is false." When the Veda is said to "assert", what is meant is that it *makes known*, becomes the means of something being known; when something becomes known on the presence of some means, this latter is said to make the former known. . .That cognition (or idea) alone is *false* which, having appeared, becomes sublated by the notion "such is not the actual case." (SB 1.1.1.2; Translation by Jhā 1973: 4)

[2] For more on intrinsic determination of veridicality see Mohanty 2001: 31-48, Phillips/Ramanuja Tatacharya 2004:72ff, and Arnold 2005: 57-110. Taber 2005 provides text, translation, and commentary on Kumārila's chapter on perception, including some of Kumārila's arguments in support of this view.

[3] As noted by Mohanty (1966).

The crux of Śabara's argument seems to be that the nature of cognition is to reveal information, and as such, there is incongruence between its revelatory nature and its being prima facie false or even doubted. Only in the light of external information does a contentful cognition become falsified.[4] Though his account seems to have affinity with Burge 1993 (discussed in section 1.4 of this dissertation), his argument from cognition's contentfulness does not focus on the patterned connections between content and subject matter. Rather, it focuses on the *revelatory* nature of cognition. Śabara claims that there is something contradictory in the notion that determinate, contentful cognitions, which fundamentally provide new information, should be doubted in the absence of defeaters or falsifying evidence.

Here, veridicality is conceived of as intrinsically known because there is no source of the entitlement other than the fact of the cognition's occurrence itself. Such prima facie entitlement is taken to be equivalent to justification (here, *prāmāṇya*), so long as it is not is vitiated by rebutting cognitions or awareness of epistemic faults which make known that what was taken to be a *pramāṇa* was in fact a pseudo *pramāṇa*. Phenomenologically, cognitions arise and purport to reveal reality, to tell us what it is like so that we can be successful in our undertakings. They are to be taken as *pramāṇa*-born unless defeaters are available. Kumārila (SV, codanā section, 49-51) supports this position with a regress argument bolstered by considerations of economy. If cognition *x* relies on cognition *y* for certification, *y* would then rely on *z*, *ad infinitum*, and certification of *x* would never arise. If the regress must be stopped at some point by an intrinsically justified cognition, why not start with the original? Mīmāṁsā thus also partakes of a kind of default and challenge methodology coupled with what may be anachronistically called a neo-foundationalism or

[4] See Arnold 2005: 64-5.

Dogmatism,[5] which allows immediate *prima facie* justification of external world beliefs unmediated by mental state beliefs. Arnold (2005: 89ff) notes that there is more than one interpretation of "intrinsic veridicality" within the influential Bhāṭṭa Mīmāṁsā school (the school which follows Kumārila). He argues that the weaker version, a claim that putative *pramāṇa*-born cognitions partake of immediate though defeasible justification, is the most faithful interpretation and the most philosophically compelling articulation of *svataḥ prāmāṇya.*

As seen above, the Mīmāṁsā position confers high grade positive epistemic status to uncertified cognitions. Its "default" view does not seem to differ radically from Nyāya, which also allows positive epistemic status for uncertified but undoubted cognition. But important distinctions remain. While Nyāya agrees that cognitions have positive epistemic status as mere occurrences, they suggest that such status is made fully evident by confirmatory subsequent cognitions. (Of course, in the case of inference from likeness, such confirmation is practically immediate.) In response to Kumārila's charge of justificational regress, Nyāya reiterates its commitment that a cognition need not be reviewed to count as knowledge. Trusting apparent deliverances of the *pramāṇas* serves us well, and certification is initiated by legitimate doubt, not the bare possibility of error. The default justification of a putatively veridical cognition is enough to stop the regress, without needing reflective

---

[5] See Pryor 2000 for a paradigmatic discussion and defense of modern Dogmatism. He offers a capsule definition:

> One can be a dogmatist about either perceptual justification or perceptual knowledge. The dogmatist about perceptual justification says that when it perceptually seems to you as if *p* is the case, you have a kind of justification for believing that *p* that does not presuppose or rest on your justification for anything else, which could be cited in an argument (even an ampliative argument) for *p.* To have this justification for believing *p*, you need only have an experience that represents *p* as being the case. No further awareness or reflection or background beliefs are required. Of course, other beliefs you have might defeat or undermine this justification. But no other beliefs are required for it to be in place. . .The dogmatist about perceptual *knowledge* adds the further claim that this justification you get merely by having an experience as of *p* can sometimes suffice to give you knowledge that *p* is the case. (519)

awareness of its having *high grade* positive epistemic status. Gaṅgeśa notes that "a cognition whose own veridicality is in fact not grasped makes certain another's veridicality, since it is itself not blemished by any suspicion about its non-veridicality" (Trans. by Phillips in Phillips/Ramanuja Tatacharya 2004: 131). Matilal (1986: 168) summarizes this point: "If c_2 [cognition$_2$, and so on] ascertains the knowledge-hood of c_1, and no doubt about the falsehood of c_2 arises, there is no need to look for c_3, etc. to ascertain the knowledge-hood or otherwise of c_2." The game of certification may go on so long as legitimate doubt or challenge exists, but in its absence, an occurent cognition stands on its own.

Positive arguments are marshaled against the Mīmāṁsā position. The one which cuts across all forms of the *svataḥ* view is phenomenological. Udayana (Dravid 1995: 320-1 and Dravid 1996: 113-4) and following him, Gaṅgeśa (Phillips/Ramanuja Tatacharya 2004: 99) argue that commonly, in unfamiliar circumstances, a veridical cognition is not trusted as veridical. It is beset by doubt from its inception, despite the absence of undercutting defeaters, contrary cognitions, or awareness of contrary qualifiers ascribed to the same locus. The cognition is endorsed only after confirmation by successful action. This indicates that veridical cognitions do not always manifest high-grade positive epistemic status at the time one is aware of them. This is taken to rebut the Mīmāṁsā position that in the absence of known defeaters or causes for doubt, positive epistemic status is always granted at the time of cognition-generation, with later inputs only serving to falsify or generate doubt.

I find this argument less than compelling because the mere novelty of the situation may be a cause for doubt. If this is the case, the intrinsic veridicality thesis is unblemished. The debate would resolve into a consideration of whether being in an unfamiliar situation is a legitimate cause of doubt, akin to the other causes discussed in section 1.3. Mīmāṁsā would have to suggest how such novelty amounts to a standard epistemic fault (*doṣa*). If they can, the intrinsic position is safe. If not, then we have a genuine counterexample to the thesis

that cognitions free from known defeaters are known to be valid as soon as one is are aware of them.

Purely theoretical arguments are marshaled against the *intrinsic* view. Mohanty (1966: 65ff), following Gaṅgeśa, argues that Nyāya's account has the advantage of economy over Mīmāṁsā. By effectively arguing that certification itself occurs during the initial awareness of a putatively veridical cognition, Mīmāṁsā requires that knowledge of the veridicality of one's cognition be a condition on unhesitating action. Nyāya's account simply requires no awareness of defeaters. Similarly, Mīmāṁsā does not appreciate the extent to which default trust may be augmented by confirmation and inter-*pramāṇic* support. Cognitions are granted a very high status from their inception and can be undermined. But the distinction between entitlement and extremely high-grade positive epistemic status is lost to them.

I think that Nyāya could also force Mīmāṁsā into a dilemma. To the degree that Mīmāṁsā maintains a strong reading of intrinsic veridicality, it—as noted by Udayana (Dravid 1995: 318) and Gaṅgeśa (Phillips/Ramanuja Tatacharya 2004: 90) respectively—amounts to the untenable position that veridical and non-veridical cognitions are always distinguishable or that doubt is practically impossible. But to the extent that Mīmāṁsā minimizes the strength of the default entitlement accorded to putatively veridical cognitions, it seems merely to repeat the Nyāya view. One may then ask whether for Mīmāṁsā such veridicality (*prāmāṇya*) is a "mere honorific" (Phillips 2004: 94). For Nyāya, conferral of the status *prāmāṇya*, which is generally recognized after certificational review, does real work in blocking further doubt.

Moreover, though I have not seen it argued explicitly, I think that Nyāya could suggest that the Mīmāṁsakas are mistaking "certification by likeness" for intrinsic determination of justification. It is easy to see why. Most persons are somewhat entrenched

in their epistemic environment, and therefore the putative deliverances of *pramāṇas* quickly become supported by inferences of the *taj-jātīyatā* kind. As such inferences are usually liminal, they are easily mistaken for intrinsic justification. But the above example of new circumstances, provided by Udayana and Gaṅgeśa, illustrates where they come apart. In such a case, the mere objecthood (*viṣayatā*) of a cognition would not be enough to ground its status as a *prima-facie* entitlement without further review.

Appendix B

Translation and Commentary on

Vācaspati Miśra's Commentary on NS 4.1.21

Argument Outline[1]

1. Introduction of topic and presentation of syllogism.
2. Defense against charges of *asiddha* (unestablishment), *siddhasādhana* (proving what is already accepted), and *viruddha* (contradiction).
3. Opponent: *viruddha* (contradiction) still remains in relation to what is specifically implied by your proof: the embodiment of the maker. God has no body, but cognition requires a body/mind complex, as seen in experience. Your proof purports to establish the cognition of an unembodied maker, but cognition requires embodiment.
4. Response: God's cognition of the world does not require things like a body as causal factors, since his cognition is not an effect. It is eternal, uncaused, and therefore requires no body or similar causal mechanism. Cognition requires causal mechanisms like a body only through the influence of the *upādhi* "being an effect." The charge of *viruddha* is therefore ineffectual.
5. Opponent: Since the concomitance is merely between *being produced* and *having a maker who is cognizant of the material causes of the product*, you have no right to infer that the maker's cognition is all-ranging, eternal, and so on. At best, some vague notion of intelligence is inferable.

[1] This summary and the corresponding numbering is mine, but the summary conforms to the text, starting at ND 953, line 1/ Anantalal, ed. 563, line 11. My commentary on Vācaspati's text will take the form of footnotes.

6. Vācaspati: By the principle of *pakṣa-dharmatā-bala*, we are able to fill out the details of the creator according to the nature of the creative act. In this case, the production of such vast and varied effects as found in the world allows us to infer that the maker has all-ranging, eternal cognition. And such cognition could not be an effect produced by the operation of a body and such, since that would require the postulation of another maker, and so on, *ad infinitum.*
7. Opponent: Like the Unseen Force [karma] that ripens of its own accord, it is possible that the production of effects like bodies and the earth arise just from the conjunction of selves and atoms. There is no need for conscious agency.
8. Vācaspati: There is a natural correlation, without *upādhis*, which is established between being *produced* and *having an agent who is conscious of the product's material cause*, etc.
9. Opponent: Your argument is beset by deviation,[2] since we find that undirected and insentient senses and psychological faculties produce cognition, that without effort, insentient milk flows from old to young cow on its own, and that trees flourish in the forest without supervision.
10. Vācaspati: such things are included in the *pakṣa* of our proof, and cannot, therefore be cited as counterexamples. And again, mere non-perception of God's performing such acts is not probative, since such is only relevant for things that are by nature perceptible.
11. Opponent: *Being produced simpliciter* is not concomitant with intelligent agency. Only that particular *being produced* which is seen to be concomitant with intelligent

[2] "Deviation" translates *vyabhicāra*, a technical term meaning a failure of *vyāpti*. It occurs when there are well-attested counterexamples to the putative concomitance between a *hetu* and a sādhya. In this case, the opponent cites alleged instances of things which have the property *being produced* without the property *having an intelligent cause.*

agency allows for the inference you wish to make. Your argument is too permissive, and would allow for bad inferences, like the inference to fire from the experience of white things like doves or white lotuses (which share the property of whiteness with smoke).

12. Vācaspati: What exactly is *being produced* as you wish to restrict it? Is it merely that which is concomitant with intelligent agency, or that which has been directly observed to be concomitant with intelligent agency? The former is accepted by Nyāya, so that is no challenge. The latter would severely restrict inferential practice, as it would prevent design inferences regarding some things obviously known to be made. Better to understand the class of produced things to be generally concomitant with intelligent agency.
13. Opponent: *Being produced simpliciter* is not concomitant with *having an intelligent agent who is cognizant of the material cause*, but only those material causes which we are able to cognize.
14. Vācaspati: That's wrong. First we establish a general concomitance, then (as seen already), we conceive of the maker according to the needs of the specific case. Since there is a natural, *upādhi*-less relation between *being a product* and *having a maker who is cognizant of the material cause*, there is no scope to doubt the inference in this way.
15. Opponent: Let that be. But your argument is counterbalanced by the following arguments: "Objects like the earth are not made by an all-knowing maker, since they are existing objects of knowledge, like pots."
16. Vācaspati: Is your proof meant to rebut an all-knowing maker or a conscious maker more generally? If the former, you still allow for a maker whose cognition ranges over part of the creation. And this is still opposed to your view. Moreover, such a

maker wouldn't have the power required (and is therefore not enough to account for the creation). If the latter, such is contradicted by ordinary cases of things like pots.

17. Opponent: There are other such counterbalancing arguments: Such a Lord could not superintend things like the atoms, since he is bodiless, like a liberated person. Or: a lordly cognition would not have all things within its scope, and is non-eternal, since it is a cognition, like our cognitions.
18. Vācaspati: Your inferences fail, since they include God and God's cognitions within the *pakṣa*. As such, they presuppose the very things they aim to refute.
19. Concluding formulations of proof, including a restatement of the proof in the *vyatirekī* form, further considerations of the nature of God's causal influence, and citation of various scriptural statements in support of the final conclusion.

There are, indeed, three kinds of things which exist in the universe. There are those things for which having an intelligent maker is well-known, like palaces, watchtowers, gates, and arches. There are those things for which not having an intelligent maker is well-known, like atoms and ether. There are things for which having an intelligent maker is doubtful, like bodies, trees, the earth, and mountains. In the last case, there is doubt regarding their status because it is something which is yet to be known, or because it is a disputed matter, and a *pramāṇa* which will either establish or refute such status has not been produced.[3] And it is not the case that mere non-perception is enough to rebut the existence of a creator, as there may be non-perception of existing things which are by nature remote, like atoms.

Therefore,

1. The things which are the subject of disputation, such as bodies, trees, mountains, and the ocean, have a maker who is conscious of their material cause (*upādāna*)
2. since they are produced (*utpattimattvāt*), or since their material cause is insentient (*acetana-upādānatvāt*).[4]
3. Whatever is produced or whatever's material cause is insentient—they are all produced by a maker who is conscious of their material cause, such as a palace.
4. The things which are the subject of disputation, such as bodies, trees, mountains, and the ocean are such. [That is, they are produced and have insentient material causes].

[3] As noted in Chapter 1, doubt (*saṁśaya*) is the condition which triggers conscious reflection on *pramāṇas* and the deployment of further inference. Udayana takes "it is a disputed matter" as a gloss on why it is "yet to be known."
[4] By employing two separate *hetus* (prover properties), Vācaspati, in effect provides two separate arguments, one from *being produced* and one from *having insentient material causes*. He does, however, focus on *utpattimattva*, "being produced" in the rest of this commentary.

5. Therefore, they too are thus [produced by a maker who is conscious of their material cause].

The property of being originated (*utpattimatva*) is not *unestablished* (*asiddha*) for the things in question. It is established, since they are composed of parts (*sāvayava*), or, having magnitude, they are capable of movement, like a piece of clothing.[5]

Nor is there the fault of *proving the established*, regarding the earth atoms, etc., on account of the Buddhists' position that karma provides for conscious agency or the Mīmāṁsakas' position that an individual self is the conscious agent. Though indeed, there is consciousness in those cases, there is no conscious acquaintance with the material cause consisting of things like earth atoms. Conversely, if there is such acquaintance, such a being is the very *Īśvara* we accept. Fine, let there be such *proving the established*; what person would not want his desire fulfilled without difficulty?[6]

---

[5] Having provided the basic argument, Vācaspati now defends it from various charges and objections, as is standard practice. The fallacy of *unestablishment* (*asiddha*) involves the relationship between the *hetu* and the *pakṣa* (inferential subject). When the *hetu* does not properly qualify the inferential subject, it is vitiated by the charge of *asiddha.* For example consider the following argument: ice can help warm your home, since it radiates heat and anything which radiates heat can contribute to the warmth of your home. Since ice is not, in fact, qualified by the property *radiates heat*, the argument would succumb to the charge of *unestablishment*. Saying that produced things have magnitude excludes the unmade atoms, while saying that they are capable of movement excludes the unmade ether.

[6] A formal proof is considered superfluous in support of a something commonly accepted. Some Buddhists and Mīmāṁsakas argue that as they accept that the sum total of individuals' karma affects significantly the ongoing modifications of the universe, the Naiyāyika's argument is merely proving what is already accepted. Kumārila expressly claims this in *Ślokavārtika*, sambandha-ākṣepa-parihāra section, 73-6). Vācaspati responds that what he is trying to prove, a single creator who is aware of the material causes upon which he works, is something other than they accept. Conversely, he points out, if what he aims to prove is already established in full, this is welcome news indeed, since his opponents would therefore cede his point.

The example (*dṛṣṭānta*) is not *devoid of what is to be proved* (*sādhya-hīna*), since things like pieces of cloth also require a maker who is conscious of their material cause, such as a weaver.[7]

For this very reason, the *hetu* is not *incompatible* (*viruddha*).[8] If there was such incompatibility, things like pots or pieces of cloth would not have makers who were conscious of their material cause. And our opponents don't contest this point anyway.

Opponent: That may be. What is specifically implied by your proof is beset by incompatibility, owing to the condition of embodiment, which is contradicted by *pramāṇas*.[9] It's like this: in the claim "From the transformation of dry grass, snow catches fire," an incompatible *hetu* is blocked by a perceptual awareness of the cold sensation [of snow], which is opposed to the warm sensation which manifests in fire. Such warm sensation is appropriate to the transformation of things like straw and is implied by something's being fiery. Likewise, in this case, a cognition whose objects are material causes like earth must be produced by such factors as self/mind connection[10] and a body. In the absence of these factors, such cognition is absent. This [that the maker be conscious] is implied by your reasoning, and is patently contradicted by *pramāṇas.* When [mind-self contact, etc.] is absent, cognition itself is also absent, as in the absence of the production of heat, fire is blocked within hoar-frost.[11]

---

[7] This fallacy consists of the charge that the example proffered is not itself qualified by the property to be proven, and therefore fails to be a legitimate token of inductive support. In the absence of a legitimate token of inductive support, an argument fails.

[8] This fallacy occurs when one's prover property establishes something contrary to that which one desires to establish.

[9] Though the exact formulation of this argument is not found in Buddhist sources, Vattanky (1984: 53) argues that Vācaspati is likely formulating this objection in response to similar considerations advanced by the Buddhists Dharmakīrti and Kamalaśīla. Kumārila also advances anti-theistic arguments of this sort. See his *Śloka-vārttika*, sambandha-ākṣepta-parihāra section, 47-9, 77-8, etc.

[10] See section 2.1.

[11] This objector agrees that there is no opposition between the properties of *being produced* and *having a maker* in the ordinary objects provided in the example. He insists, however, that opposition exists between the kind of maker implied by Vācaspati's proof—a bodiless maker—and such a maker's

Vācaspati: No. It is wrong to hold that in the absence of the non-pervader there would be the absence of the non-pervaded. Come now! If a causal factor does not pervade an effect, then the putative concordance between a pervader and that which is pervaded is terminated. What you claim would be true if [the cosmic maker's] cognition of material causes like earth were an effect (*kārya*), but we hold that his cognition is eternal. Therefore, the absence of a body does not entail the absence of such cognition, since the absence of the non-pervader does not entail the absence of the non-pervaded. Otherwise, the claim "Maitra does not have a horse" would entail that he does not have a cow. [12]

And it is not right to contend that from extensive experience of [only] non-eternal cognitions, an eternal cognition is shown to be impossible. For it should not be supposed that since perceptible droplets of water, which cause things like snow, and in which qualities like impermanent color inhere, are impermanent, that their causes, the water atoms or the color which inheres in them must be impermanent.[13] Both of us accept that eternality (*nityatā*) is the condition of something's existing without a cause.[14] And it is not right to reason that since each instance of cognition which we experience is pervaded by *embodiment*, cognition as such is pervaded by *embodiment* and other such factors. For being pervaded (*vyapyatā*) is to have a *natural* (or *essential*) *relation* (*svābhāvi-sambandha-śālitā*). This relation holds in

---

having cognition, which is a necessary condition for his apprehending the objects within the domain of the *pakṣa*. The objector claims that cognition requires a psychophysical apparatus in order to be produced and the proposed maker would have none, as they are not yet assembled at the time of creation. As such, the maker would be unable to cognize things like earth atoms and his alleged act of creation would be impossible.

[12] The pervader (*vyāpaka*) is the necessary concomitant of the pervaded (*vyāpya*). X is a pervader of Y if every Y-instance is also an X-instance. The opponent is arguing by *modus tollens*: If there is cognition, there must be a body. If the supposed creator has no body (since he put all bodies together), he must have no cognition. Vācaspati's response is to deny that having a body is a necessary condition of all cognitions. As such, the opponent cannot successfully argue by *modus tollens* against God's having cognition.

[13] Nyāya holds that atoms, which are indivisible and eternal, are colored.

[14] This sentence closely resembles *Vaiśeṣika-sūtra* 4.1, which provides a definition of eternality: *sad-akāraṇavan nityam*. "The eternal is that which exists without being caused."

the absence of *upādhis*.[15] A cognition's *being-an-effect* (or *producthood*) is the *upādhi* required for it to be pervaded by possessing-a-body. An effected cognition undeviatingly has like a body as its causes. Though an eternal cognition does deviate from the condition of embodiment, it does not oppose the experience of pervasion that we are interested in.[16]

Thus, it's like a challenger's rejecting the following argument: "Sound is impermanent, since it is produced, like a pot," owing to the dissimilarity of the properties in the *sādhya* and the *dṛṣṭānta*. The challenger would argue: "If, because of being produced—a property in common with the pot—sound is impermanent, then look! from that alone [from mere similarity], sound must colored too. If sound is not possessed of color owing to its similarity with a pot, then it should also not be deemed impermanent." The challenger, by deploying the rejoinder *equivocation by addition of a property,* is thus defeated. [17] In such a

[15] Within inference, an *upādhi* is a property which is concomitant with the *sādhya* but not the *hetu*. As such, if a supposed pervasion requires the presence of an *upādhi*, the pervasion is not genuine. An example: One may appeal to the following pervasion: *where there is fire, there is smoke.* But this is not a true pervasion, since fire causes smoke only in the presence of a an *upādhi* which is not always present: damp or green wood. Awareness of such *upādhis* vitiates an inference. See Phillips 2002: 14-30 for a clear introduction to the *upādhi*, which Phillips translates as "inferential undercutting condition."

[16] We may note that here the line that Vācaspati is walking clearly reflects the principled expansion of knowledge sources spoken of earlier in this dissertation. He wants to rely on common inferential patterns, while allowing for innovation which goes beyond them. Here he argues that such innovation (in the notion of cognition generated without a body) is not a violation of commonly acknowledged inferential relations.

[17] The fifth chapter of the *Nyāya-sūtra* discusses a number of sophistical rejoinders (*jātis*) based on equivocation and faulty analogizing between cases. Common to all of the rejoinders is an appeal to bare similarity between an example and the case at hand in order to motivate an inference. In genuine inference the example is supposed to reveal a *universal* concomitance between the prover property and the probandum property. Appeal to accidental similarity is not enough to ground a genuine concomitance. In the example given by Vācaspati, his opponent claims that inasmuch as sound has some similarity with a pot (namely being produced), it must share others (namely being possessed of color). This is a case of the sophistical rejoinder "addition of a property" (*utkarṣa-sama-jāti*), mentioned in NS 5.1.2 and 5.1.4). If one catches an opponent deploying such a rejoinder in public debate it provides for immediate victory. See Matilal 1998 60ff. Vācaspati is claiming that his opponent is committing this fallacy in the following way: The opponent contends that since God's cognition and our cognitions share certain features, like providing information or being means of cognitive access with the world, they must share other, non-essential features like requiring a body.

It is noteworthy that Dharmakīrti claims not to be committing this very fallacy in his criticism of the Nyāya proof. He argues that there is a fundamental distinction in kind (*jāti*) between pots, as produced by common makers and things produced by god-like makers (1968: 14).

way one who argues thus must also be defeated as an *equivocator by addition of a property*, from the objection that bare similarity has no probative force. Moreover, he would destroy all inference by making it too easy.[18]

Opponent: That may be. The property *being produced* is pervaded by *being preceded by a maker cognizant of the material causes, etc., simpliciter*, as seen in things like pots. You may establish this much only: that such *simpliciter* should hold for things like the earth. Wherefrom arises the property *being a make whose cognition grasps eternity*? For it is not found to be a property of the substance in the example of things like a pot.[19]

Vācaspati: What would happen to the inference that would prove the existence of visual organs and the like from the experience of things such as color through the property *being an action*? For actions like cutting don't commonly establish the existence of sense-faculties; they establish the existence of things like axes.[20] But that there is a prover property which establishes the existence of *sense faculties*—though indeed it is never found to be a property of the cited example—is established by the principle of *pakṣa-dharmatā-bala* (the strength of the *hetu's* qualifying the *pakṣa*). For *being an action*, present in the perception of things like color, establishes a causal instrument which is capable of effecting cognition. Things like axes lack such capacity. From *pakṣa-dharmatā-bala* something previously unknown, which is distinct from things like axes, is brought into the picture.

The same holds in this case. For if there were not a cognition which ranges over all things, which simultaneously grasps the production of effects characterized as moving and

---

[18] If bare similarity (e.g., that both sound and pots are produced) were enough to generate acceptable inferences (e.g., that, therefore, both sound and pots are colored), the conceptual connections and law-like patterns which given inference would be undermined since most things are similar to most other things in some respect.

[19] The opponent thus allows for the inference to go through in an attenuated form. This is reminiscent of Hume's allowance for some vague principle of intelligence behind the cosmos in the *Dialogues*, Vācaspati's opponent now restricts his objection to the robust theistic conclusion of the inference.

[20] The principle that every action requires an instrument is assumed here.

non-moving, sensible and supersensible, spread throughout unlimited, immeasurable space, or if the cognition weren't eternal, it would be unfit to prove our intended result.[21] And indeed, it is not possible that such a cognition, befitting the Supreme Lord, is the effect of senses and a body which are themselves created. Before the production of such a body, he would have to be insentient.[22] There would be the undesired consequence that yet another creator would have to be postulated as existing prior to that to produce it [the maker's body], which has the nature of a product. And before that, another, *ad infinitum*. It is better to propose a single supersensible being with eternal cognition than many supersensible beings.[23] From this consideration alone, the proposal that there is an eternal body is also rebutted.[24]

By this, what some say—

> Although anything possessed of such features as structure is caused by something possessed of intelligence, how can *a single* causal principle be established from such features as structure—

[21] I should note that a questionable assumption of Vācaspati is that the entire creation takes place simultaneously (*ayaugapadya*), requiring a single, extensive cognition. Much is packed into this idea, as it ignores the possibility of a gradual creation which increases in complexity over time and dint of locally caused change.
[22] As noted above, Nyāya holds that ordinary selves require a body-mind complex in order to undergo experience of any robust kind. The condition of a liberated soul is sometimes compared to deep sleep.
[23] As he will mention in a few lines, Vācaspati is appealing to the principle of *lāghava*, ("lightness" or "simplicity") which is akin to Ockham's razor. It is always better to postulate fewer supersensible entities, if they equally serve explanatory needs. Vācaspati's argument for the special status of the creator's cognition is two-fold. First, it must be extensive enough to cover the entire universe and all things within it in order to account for creation. This establishes something like omniscience. Second, God's cognition is distinguished from ordinary cognition in that it is not produced by a body, since the latter would result in an infinite regress. This establishes that it is uncreated and eternal.
[24] Vattanky (1984) argues that Vācaspati's point is that the principle of *pakṣa-dharmatā-bala*, combined with a concern for simplicity or "lightness", gives us good reason to reject the thesis that God has an eternal body, when the thesis of an unembodied God does the job in a simpler way.

is refuted. One who wishes to refute omniscience [of the maker] could do so, if fleshy eyes had the power to see atoms, selves, and the karma which inheres in them [since, in that case, a multitude of ordinary beings could act as creators]. But there are no fleshy eyes with such capacity. Therefore, you would have to postulate many beings capable of perceiving supersensible objects which are distinguished from us. It is better, for the sake of simplicity (*lāghava*), to posit one such being.

Opponent: Like the Unseen Force [karma] that ripens whenever it does, it is possible that the production of effects like bodies and the earth arise just from the conjunction of selves and atoms. So much for your conscious agency.

Vācaspati: This should not be said. There is a natural correlation, without *upādhis*, which is established between being *produced* and *having an agent who is conscious of the material cause*, etc.

Opponent: Your argument is beset by deviation,[25] since we find that uncognized mind and senses produce cognition, and without effort, insentient milk flows from old to young cow on its own, and trees flourish in the forest.

Vācaspati: That's not correct, since all of them are included in the *pakṣa* as they are under dispute. And it is not the case that, like the existence of a rabbit's horn,[26] the *hetu* cannot qualify the *pakṣa* since it is contradicted by non-perception [i.e., we do not see a cosmic maker putting things together just as we do not see a horn on the head of a rabbit.] Since the Lord (*bhagavān*) is not fit to be apprehended by [ordinary] perception (*darśana-anarhatayā*), proof by non-perception does not apply. Otherwise, you face the consequence

[25] "Deviation" is the translation of *vyabhicāra*, a technical term meaning a failure of *vyāpti*. It occurs when there are well-attested counterexamples to the putative concomitance between a *hetu* and a *sādhya*. In this case, the opponent cites alleged instances of things which have the property *being produced* without the property *having an intelligent cause.*
[26] A rabbit's horn, like a flower in the sky, is a stock example in Indian logic of an entity which does not exist.

that inference would be completely undermined.[27] This does not entail that we reject the evidence of non-perception regarding something like a "rabbit's horn," since such a horn is in principle perceptible, as is the horn of a calf.

Opponent: That may be. It is not the case that *being produced* simpliciter is naturally concomitant with *having an intelligent cause.* But rather a particular kind of *being produced.* One who has not seen the act of production infers intelligence behind something which is known to be produced. Something whose presence and absence is known to regularly conform to the presence and absence of an intelligent maker, like a pot, is concomitant with *having an intelligent agent.* But those things which have the property *being produced* simpliciter, like organic bodies and the earth are not, since they are not found to have such regular conformity. Therefore the general property *being produced* makes use of the *vyāpti having an intelligent maker* by means of an *upādhi* which qualifies it. Because of that, there is no natural relation between them. And it is not fit to establish your claim. Otherwise, there is the consequence that there may be an inference to fire from the color white, which also subsists in white lotuses and doves, which trades on the *vyāpti* between fire and smoke.[28]

Vācaspati: Here is our response, which you should examine carefully. Does this particular kind of *being produced* conform to the presence and absence of intelligent agency or to that intelligent agency with which is *seen to be* concomitant? If the first, such is admitted by those who agree that things like organic bodies and the earth are qualified by *having an intelligent maker*. For one cannot shamelessly claim that a cause's presence and absence does not conform to its effect. Or, if it conforms only to what is directly experienced

---

[27] Holding that non-perception *simpliciter* is enough to reject something's existence would delegitimize all inference, since inference starts from perceptible facts/objects and by means of the pervasion relation, generates knowledge of currently non-perceptible facts/objects.

[28] This objection echoes Dharmakīrti's arguments in the *Pramāṇa-vārttika*. Again, it evinces a concern for laxity in inferential practice. Vācaspati must explain how his view won't engender such laxity and that Dharmakīrti's restrictions are too rigid.

to be concomitant with intelligent agency, then there is no possibility to cognize that something is produced for those who have not seen it themselves. [Only] that very cloth which is seen to conform to the presence and absence of an intelligent maker is the effect of intelligence, and not the one in seen the market alone.

Opponent: In that case, something of the *same kind* (*taj-jātīya*) is seen to conform positively and negatively to the presence of an intelligent maker, though the conformity of the thing in question is not directly experienced. Something of the same kind would be similar.

Vācaspati: Come now, things like pots, which are produced, conform positively and negatively to makers endowed with intelligence. Something else, of the same class, like organic bodies or the earth would be similar. It cannot be driven away a stick.[29]

Opponent: Something produced, *insofar as it is a member class of pots*, is concomitant with intelligent agency.

Vācaspati: That is wrong. For then things like mansions would not have an intelligent maker, since they are not members of the class of pots. Certainly, something not directly experienced as having positive and negative concomitance with an intelligent maker can be taken to, so long as something of its kind is seen to do so. How is it that as members of the class of products (*kārya-jātīya*), things like mansions are now considered to be concomitant with intelligent makers, though [at least in principle] not experienced as such, while similar things like organic bodies and the earth would not be? There is indeed no difference at all with respect to that class (the class of things which are produced, *kārya-jātīya*).

[29] In other words, argument is required to support the opponent's distinction. Animals are often warded away by waving a stick.

We know that it is not the case that as a transformation of earth, an anthill has the property *made by a potter*, like a pot. Such is contradicted by the absence of perceptual evidence for such a potter. Still, it may be inferred that it is fashioned by an unseen maker.[30]

Opponent: That may be. *Production simpliciter* is not concomitant with *having a maker who is cognizant of the material cause*, but rather, *production with material causes and the like which beings like us have the power to cognize.* And thus, although things like organic bodies and the earth are produced, since there is an absence of pervasion with *having a maker who is cognizant of the material cause*, they are not concomitant with such a maker.

Vācaspati: That is wrong. First, a concomitance is established, by means of positive and negative correlation, between *having a maker who is cognizant of the material cause* and *being produced.* Then the nature of the maker who has the capacity to cognize the material cause, etc. is settled upon according to the scope of the cognition required to produce the effect. That the maker is sentient is established by the strength of the concomitance. That his cognition is eternal is, we maintain, established by the strength of the *hetu's* qualifying the *pakṣa* (*pakṣa-dharmatā-bala*). From this, there is a natural relationship between *being produced* and *having an intelligent maker*, since we do not find an *upādhi* upon which it depends. And the following doubt is not possible: *being produced*, which has a natural relation, will exceed its natural relatum. For that would undermine the very notion of natural relation.

Opponent: That may be. The inference under discussion is a pseudo-inference (*anumāna-ābhāsa*) as it is counterbalanced by existing arguments. Arguments like the

[30] This is a response to Dharmakīrti's contention (PV 1.14; 1968: 15), that given Nyāya's method of reasoning, we should be able to infer the presence of a potter from an anthill, since both pots and anthills are transformations of clay (*mṛdvikāra*). Vācaspati retorts that we may marshal the evidence of other *pramāṇas* to avoid inordinate inferential liberality of the kind Dharmakīrti is worried about.

following establish an opposed conclusion: "Objects like the earth are not made by an all-knowing maker, since they exist as objects of knowledge, like pots."[31]

Vācaspati: We respond as follows. Is the condition *being concomitant with an all knowing maker* rejected by this argument? Or is the condition *concomitant with a maker who is sentient, simpliciter* allowed, while the notion *all knowing* is rejected by implication? If you choose the first, this would still establish a *concomitance with a knower who is not omniscient*. And this is against your tenets (*apasiddhānta*).[32] And this isn't possible anyway [as already proven]. For things like the earth are not fit to be made by beings that cognize like we do. If, conversely, your argument denies *concomitance with a maker who is sentient, simpliciter*, there is deviation (*vyabhicāra*) regarding pots and the like.[33]

Opponent: Such a Lord could not superintend things like the atoms, since he is bodiless, like a liberated person.[34] Or: A lordly cognition would not have all things within its scope, and would not be eternal, since it is a cognition, like our cognitions.

Vācaspati: This inference, first of all, cannot establish itself, let alone rebut our proof. To meet the condition of *pakṣa-dharmatā*, it requires the establishment of *Īśvara* and his *possessing intelligence.* From the start, this inference is rebutted by the very *pramāṇas* required to put these things forth.[35] For it is not the case that sacred testimony and inference establish the *īśvara* alone without the qualities *possessing eternal cognition which ranges*

---

[31] Again note the opponent's conservatism.

[32] In other words, if an all-knowing creator is rejected, a more limited creator is still allowed, and this would still contradict the opponent's view.

[33] An argument which purports to deny a sentient maker for things which are existing objects of knowledge deviates, as there are clear cases of existing objects of knowledge which have sentient makers, e.g., pots.

[34] Most Naiyāyikas hold that enlightened beings, free from the cycle of birth and death, exist in an unembodied state. As such, they lack the ability to act and to cognize things apart from themselves. Kumārila provides analogous arguments in *Śloka-vārtika*, sambandha-ākṣepa-parihāra section, 47, 78, etc.

[35] That is, whatever *pramāṇas* the opponent cites in order to introduce and defend terms within his inference will militate against its conclusion. This is a direct ancestor of Udayana's *āśraya-āsiddhi* argument noted in Chapter 4.

over all things and *creator of the universe.* Accordingly, it is proved that your inference conflicts with them and is not fit to produce a refutation of *Īśvara*.

And although his effort and his desire informed by cognition are eternal, they should be understood to be included in the proof of his agency, since the characteristics of desire to act informed by cognition and effort are inherent in agency (*kartṛtva*). Owing to mutual entailment, the proof of one is a proof of the other. Thus, from the property *being produced*, along with *pakṣa-dharmatā*, there is proof of such an *Īśvara*.

Or, let's say [for the sake of argument] that the *agency and cognition of the material cause alone* is established.[36] By means of a *pariśeṣa* inference, an established difference, something special is proved.[37] Thus:

1. The [cosmic] maker who is conscious of the material causes of things like bodies and the earth is not possessed of non-eternal, limited cognition.
2. Because otherwise, there is the contingency that the maker of things like bodies and the earth would not be conscious of their material causes.[38]
3. For, such a maker who does not cognize the material cause of his creation is not found, as with the likes of us.
4. He [the maker] is aware of the material causes of the creation.

[36] This sentence is a restatement of the conclusion of the original syllogism.
[37] Vātsyāyana describes this kind of inference as an argument by elimination. Vācaspati has a different notion of *pariśeṣa* inference, and considers it akin to a proof by negative concomitance (*kevala-vyatirekī*). See section 2.2 for a discussion of negative-only inferences. Again, note that the argument for *Īśvara* can easily be construed as a two-step inference. The first step depends on fairly common applications of inductive generalization in order to claim that the world is a product (requiring a maker of some kind). The second, by something akin to inference to the best explanation, argues for *Īśvara* as the maker of the world.
[38] Again, an unstated premise is that the nature of the creation requires a creator whose cognitive powers are able to encompass the entire cosmos and fit to grasp supersensibles like atoms and souls.

5. Therefore, he is also thus [not possessed of non-eternal cognition which does not range over all things].

For indeed, someone other than *īśvara* as we conceive him is not able to cognize the various atoms and the storehouses of karma which inhere in individual selves, as will be explained further below. For the *īśvara* is capable of overseeing karmic merit and demerit, which inhere in other persons, owing to a connection it has with them. The operative relationship is not restricted to the two direct relationships of conjunction and inherence, but also includes inherence in the conjunct which is conjoined. It is indirect.[39] The atoms, etc. are in contact with *īśvara*. And the selves are conjoined with the atoms. And merit and demerit inhere in selves. Or, there is inherence in what is conjoined owing to the connection between *īśvara* and the self, because of the realized possibility of a beginningless conjunction. Or *īśvara* will take up the merit/demerit of the objects of his actions without taking into account any dharma of his own [since he has no karmic merit], like one who knows how to counteract poison [by means of charms] make the bit of poison the object of his action.[40]

By this material causes which are conscious are also explained.

[39] This sentence begins a fairly dense discussion which considers the kind of relation that God must have with the karmic residue inhering in individual selves such that he (God) can "read" it, and thus govern the creation in accord with such karma. The two standard relationships, conjunction (*saṁyoga*) and inherence (*samavāya*), are problematic, since God should not be touched by karma in the way that ordinary people are. The relation *inherence in the conjunct which is conjoined* could be applied in this way: God is in contact with karma, which inheres in individual selves, by means of his contact with the selves. His contact with the selves is further displaced as it takes place through contact with the atoms which make up the selves' bodies. This displaced relationship allows for the appropriate distance between God and karma.

[40] In the last few sentences, Vācaspati allows for a number of accounts by which God may control creation without being tainted. His goal is not to offer a definitive account, but to argue that an account is possible, and therefore the impossibility of an account cannot be cited as a reason to argue against God's causal role in creation. The example offered of a healer refers to a common classical idea that some healers are able to excise poison by means of mantra, chants, and thereby do not have to touch the poison directly.

Consciousness is the prover provided by Uddyotakara through indirect indication. Reasons like *being produced* should be understood according to context.[41]

Scripture (*āmnāya*) confirms this argument:

> This is the Imperishable, Gargi, on whose order the heaven and earth remain separate.[42]

> The one God producing heaven and earth.[43]

> He thought: Let me become many. Let me propagate.[44]

And so forth. And there are traditional texts as well.[45]

> The unknowing creature is not the Lord. Moving away from the self, impelled by the Lord, it goes toward happiness or distress; towards heaven or hell.[46]

And the Veda points out that the Lord's cognition is eternal, existing without cause.

---

[41] Vācaspati is saying that, while seemingly different, his preferred *hetu* to establish God and that given by Uddyotakara converge in their application and extension.
[42] *Bṛhadāraṇyaka Upaniṣad* 3.8.9.
[43] *Ṛg Veda* 10.81.3
[44] *Chāndogya Upaniṣad* 6.2.3.
[45] Here "traditional texts" is a loose translation of *smṛti*, "that which is remembered". This is a broad classification of texts whose authority is subordinate to the Veda but which are nevertheless extremely important for classical Hindus.
[46] *Mahābhārata* 3.20.26.

> Without feet or hands, he is swift and he grasps. Without eyes, he sees. Without ears, he hears. He knows what is to be known, but no one knows him. They speak of him as the Highest, the Great Person.[47]

And so forth. By these very texts, that the Lord is bodiless is demonstrated. I have elaborated only what was left out by Uddyotakara, the author of the *Vārttika*, and this is now done.

[47] *Śvetāśvatara Upaniṣad* 3.19.

Appendix C

Notes on Ratnakīrti's Argument Against Īśvara

Ratnakīrti (c. 1000-1050 CE), stands as one of the last great masters of India's Yogācāra Buddhism. He was a trenchant critic of Nyāya's rational theology, and his arguments are collected in the *Īśvarasādhanadūṣaṇa* (*The Faults of the Proof for Īśvara*).[1] As I have illustrated in Chapter 4, the Buddhist critique of Nyāya focuses on the epistemology of inference, and, for Ratnakīrti, includes an attack on Nyāya's basic understanding of the nature of concomitance (*vyāpti*) and the means by which concomitance is grasped.

For Nyāya, *vyāpti* is the relationship between two relata such that the experience of one (the pervaded or *vyāpya*) is sufficient grounds to infer the existence of the other (the pervader or *vyāpaka*). Generally, Nyāya argues that awareness of concomitance arises from *bhuyodarśana*, "wide experience" of concomitance, with a corresponding non-experience of deviation (*vyabhicāra*, where the supposed prover property and the absence of the probandum property are present in a single locus). Also critical, as seen Vācaspati's argument above, is the absence of *upādhis*.

> For being pervaded (*vyapyatā*) is to have a *natural* (or *essential*) *relation* (*svābhāvi-sambandha-śālitā*). This relation holds in the absence of *upādhis.*

Within inference, an *upādhi* is a property which is concomitant with the *sādhya* but not the *hetu*. As such, if a supposed pervasion requires the presence of an *upādhi*, the pervasion is not genuine. An example: One may appeal to the following pervasion: *where there is fire,*

[1] Patil 2009 is the definitive study of Ratnakīrti's anti-theistic arguments. Vattanky 1984 provides an overview of Ratnakīrti's arguments.

there is smoke. But this is not a true pervasion, since fire causes smoke only in the presence of an *upādhi* which is not always present: damp or green wood. Awareness of such *upādhis* vitiates the putative *vyāpti* between fire and smoke.[2]

A key feature of Ratnakīrti's argument is that even if Nyāya can claim that by its method of observation (and corresponding non-observation), no deviation or *upādhis* have been found, it still lacks the means to rule out *potential* deviation.[3] He holds that deviation (or *upādhis*) may yet exist, while being "spatially, temporally, or essentially remote" (*deśa*-*kāla*-*svabhāva*-*viprakṛṣṭa*) (Patil 2009: 124-5). Since there is no guarantee that the world does not outstrip our cognitive faculties (for Nyāya, not Buddhism, he will contend), we can never be sure about such deviation. In short, he suggests that there is "doubt about exclusion from all dissimilar cases," *sandigdha*-*vipakṣa*-*vyāvṛtti.*) Hence, Nyāya's account of *vyāpti* lacks the resources to establish even the inference from smoke to fire, let alone from the created world to *Īśvara*.

Nyāya, as seen in Chapter 1, is doxastically conservative, and holds that doubt needs motivation beyond the bare logical possibility of cognitive failure. In this context, Vācaspati directly addresses the issue of inductive concomitance.

> We do not accept the following: "Mere doubt regarding a possible *upādhi* may undermine the natural relation [between the relata of a *vyāpti*] because, while uncognized, it may be uncognizable in principle, and therefore, there is

[2] See Phillips 2002: 14-30 for a clear introduction to the *upādhi*, which Phillips translates as "inferential undercutting condition."

[3] Patil (2009: 149): "His most important criticism of the Nyāya theory is his argument that the Naiyāyikas cannot show by observation and nonobservation that [the conditions that a putative *vyāpti* be free from deviation and *upādhis*] are ever satisfied." And "For Ratnakīrti, it is not necessary that a specific property-possessor be presented to awareness for there to be an epistemically significant doubt about whether it possesses a particular property [specifically that it possess both the putative *hetu* or prover property and the absence of the *sādhya* or probandum property].

no available *pramāṇa* to settle the issue of its existence." For necessarily, if doubt is not rule-bound, there is an opportunity for the ghost of doubt to be released by transgressing the governance of *pramāṇas*. In that case, one would never act, since (i) unknown objects would somehow become a matter of doubt for everyone, (ii) doubt about unknown objects would contribute to inactivity on the part of thoughtful people (*prekṣāvat*), and (iii) in the end, illness and death are found even for those who are nourished by good food and drink [illustrating that one looking for doubt will be lead to question even the obvious connection between eating well and good health]. Therefore, those who maintain the conduct of reflective people (*pramāṇika-loka-yātrā*) doubt things as they arise, not as they do not arise. Doubt depends on something specifically remembered, not something non-remembered. It is not right to doubt something beyond the range of memory. Therefore, we can be certain of the natural condition of the relationship [between the relata of the *vyāpti*] if we have made a good-faith effort to discover *upādhis* and determine that there are none. (NVT 1.1.5; ND 139)[4]

From the Nyāya perspective, Ratnakīrti's position seems no better than a fairly unsophisticated inductive skepticism. But Ratnakīrti, who directly cites Vācaspati's repudiation of "objectless" doubt (see Patil 2009: 129) argues otherwise. I will focus on two

[4] *na ca adṛṣyamāno 'pi darśana-anarhatayā sādhaka-bādhaka-pramāṇa-abhāvena sandihyamāna upādhiḥ svābhāvikatvaṁ pratibadhnāti iti sāmpratam. avaśyaṁ śaṅkyā bhavitavyaṁ niyāmaka-abhāvād iti data-avakāśā khalv iyaṁ pramāṇa-maryāda-atikrameṇa saṅkā-piśācī labdha-prasarā na kvacid nasti iti na ayaṁ kvacid pravarteta sarvatra eva kasyacit kathañcid anarthasya śaṅkā-āspadatvāt. anartha-śaṅkāyāś ca prekśāvatāṁ nivṛtty-aṅgatvāt. antataḥ snigdha-anna-pāna-upayogeṣv api maraṇādi-darśanāt. tasmāt prāmāṇika-loka-yātrām anupālayatā yathā-darśanaṁ śaṅkanīyam na tv adṛṣṭa-pūrvakam api, viśeṣa-smṛty-apekṣo hi saṁśayo na asmṛter bhavati na ca smṛtir ananubhūcare bhavitum arhati. tasmād upadhim prayatnena anviṣyanto 'nupalabhamānā na asti ity avagamya svābhāvikatvaṁ sambandhasya niścinumah* (NVT 1.1.5; ND 139).

features of his response. First, he argues that even if there were such universal doubt, it would not, contra Nyāya, result in universal stultification. People commonly act in uncertain conditions. In short, I think that his response fails to recognize the function of *pramāṇas* for Nyāya. Paradigmatically, Nyāya takes the *pramāṇas* to be life-guiding cognitive mechanisms. Doubt, for them, is the occasion for belief review and resolution. It is something important. By deflating his notion of doubt, Ratnakīrti drains it of importance, and it would not seem to play any serious cognitive role.

Second, and more significantly, Ratnakīrti's antirealism, (as illustrated well in Patil 2009: 302ff) allows him to argue that he is not beset with the problems of potential deviation and *upādhis* that Nyāya faces. For Ratnakīrti, "modal truths are attributable for the most part to the conventions on the basis of which we construct objects" (Patil 2009: 303). His version of the Buddhist theory of *apohavāda* maintains that entities like class types are constructions generated by cognitive processes, not discoveries of external realities. In short, since they are in some way "under our control," we need not worry about potential deviation in the way that the realist Naiyāyikas do.

Again, I think that Nyāya has the resources for an effective response, which I will suggest in outline. First, given that Ratnakīrti's anti-realism is quite extensive (bordering on solipsism), one wonders if its putative cognitive benefits in this case are worth the other problems it generates. Second, for Nyāya, *vyāpti* is undergirded by universals, real features of the world which ensure non-deviation.[5] Therefore the criticism that on its own terms, Nyāya lacks the resources to ensure *vyāpti* does not hit the mark. Third, granting Ratnakīrti's notion that we generate things corresponding to universals "ourselves," such is not enough to ensure our analogues of universals do not deviate either, unless he contends that we have cognitive access to the processes by which such generation occurs, and can be sure that those

[5] K. Chakrabarti 1975: 364-5.

processes will not misfire or change in the future. Such access and confidence are, however unlikely, even by his lights.

Bibliography

Adams, Robert M. *The Virtue of Faith*. New York: Oxford University Press 1987.

Alder, Jonathan. "Epistemological Problems of Testimony." *Stanford Encyclopedia of Philosophy.* Journal online, accessed June 13, 2007. Available from http://plato.stanford.edu/entries/testimony-episprob/. Internet.

Alston, William. *Epistemic Justification: Essays in the Theory of Knowledge.* Ithaca: Cornell University Press 1989.

Alston, William. *Perceiving God*. Ithaca: Cornell University Press 1991.

Alston, William. "Perceptual Knowledge" in Greco and Sosa 1999.

Alston, William. "How to Think about Reliability" in Sosa and Kim 2000.

Alston, William. *Beyond Justification: Dimensions of Epistemic Evaluation.* Ithaca: Cornell University Press 2005.

Arnold, Dan. *Buddhists, Brahmins, and Belief: Epistemology in South Asian Philosophy of Religion.* New York: Columbia University Press 2005.

Audi, Robert. *Epistemology: A Contemporary Introduction to the Theory of Knowledge.* Second Edition. New York: Routledge 2003.

Balcerowicz, Piotr. "What Exists for the Vaiśeṣika?" *Logic and Belief in Indian Philosophy.* Warsaw Indological Studies, Vol. 3 2008.

Barnes, Jonathan, ed. *The Complete Works of Aristotle*. 2 Volumes. Princeton, NJ: The Princeton University Press 1984.

Bhatt, Govardhan P. *Epistemology of the Bhāṭṭa School of Pūrva Mīmāṁsā*. Varanasi: The Chowkhamba Sanskrit Series Office 1962.

Bhatta, V. P. *Word: The Śabdakhaṇḍa of the Tattvacintāmaṇi (with Introduction, Sanskrit Text, Translation and Explanation).* Part 1. Delhi: Eastern Book Linkers 2005.

Bhattacaryya, Gopikamohan. *Studies in Nyāya-vaiśeṣika Theism.* Calcutta: Sanskrit College 1961.

Bhattacharya, K., E. H. Johnston and A. Kunst. *The Dialectical Method of Nāgārjuna: Vigrahavyāvartinī.* New Delhi: Motilal Banarsidass 1985.

Bijalwan, C. D. *Indian Theory of Knowledge based upon Jayanta's Nyāyamañjarī.* New Delhi: Heritage Publishers 1977.

Bilimoria, Purusottama. "Hindu Doubts About God: Toward a Mīmāṁsā Deconstruction." *International Philosophical Quarterly* 30 (1990): 481-99.

Bochenski, J. M. “The Indian Variety of Logic” in Ganeri 2001a.

BonJour Laurence. “Externalism/Internalism” in Dancy and Sosa 1993.

BonJour, Laurence. *The Structure of Empirical Knowledge.* Cambridge: Harvard University Press 1985.

BonJour, Laurence and Ernest Sosa. *Epistemic Justification: Internalism vs. Externalism, Foundations vs. Virtues.* Malden, MA: Blackwell Publishing 2003.

Brandom, Robert. “Knowledge and the Social Articulation of the Space of Reasons” in Sosa and Kim 2000.

Broad, C. B. *Religious Belief.* Ithaca, NY: Cornell University Press: 1959.

Brockingham, John L. “Epic Yoga.” *Journal of Vaishnava Studies V*ol. 14 No. 1 (Fall 2005), 123-138.

Brown, Mackenzie, C. “The Design Argument in Classical Hindu Thought.” *International Journal of Hindu Studies*, Vol. 12, No. 2 (2008): 103-151.

Bryant, Edwin. *The Yoga Sūtras of Patañjali*. New York: North Point Press 2009.

Bulcke, C., S. J. *The Theism of Nyāya-Vaiśeṣika: Its Origin and Early Development.* Delhi: Motilal Banarsidass 1968.

Burge, Tyler. "Content Preservation." *The Philosophical Review*, Vol. 102, No. 4 (October 1993), 457-488.

Byrne, Alex and Heather Logue, eds. *Disjunctivism: Contemporary Readings.* Cambridge, MA: The MIT Press 2009.

Chakrabarti, Arindam. "Plato's Indian Barbers" in Matilal and Shaw 1985.

Chakrabarti, Arindam. "Introduction" in Matilal and Chakrabarti 1994.

Chakrabarti, Arindam. "From the Fabric to the Weaver." In Perrett 1989.

Chakrabarti, Arindam. "On Knowing by Being Told" in Perrett 2000.

Chakrabarti, Arindam. "Against Immaculate Perception: Seven Reasons for Eliminating *Nirvikalpika* Perception from Nyāya." *Philosophy East and West*, vol. 50, no. 1 (January 2000): 1-8.

Chakrabarti, Kisor Kumar. "The Nyāya-Vaiśeṣika Theory of Universals." *Journal of Indian Philosophy* 3 (1975): 363-382.

Chakrabarti, Kisor Kumar. "Some Remarks on Indian Theories of Truth." *Journal of Indian Philosophy* 12 (1984): 339-355.

Chakrabarti, Kisor Kumar. *Classical Indian Philosophy of Mind: The Nyāya Dualist Tradition.* Albany: State University of New York Press 1999.

Chatterjee, Satischandra. *The Nyāya Theory of Knowledge.* Calcutta: The University of Calcutta 1939. Reprint 1978.

Chemparathy, George. "Two Early Buddhist Refutations of the Existence of the Īśvara as the Creator of the Universe." *Wiener Zeitschrif für die Kunde Süd-und Ostasiens und Archiv für indische Philosophie* 12-13 (1968-9), 85-100.

Chemparathy, George. *An Indian Rational Theology: Introduction to Udayana's Nyāyakusumāñjali.* Publications of the De Nobili Research Library, Vol. 1. Vienna: Gerold & Co.; Delhi: Motilal Banarsidass 1972.

Clark, Kelly James. *Philosophers Who Believe.* Downers Grove Ill.: Intervarsity Press 1993.

Clooney, Francis X., S.J. "The Existence of God, Reason, and Revelation in Two Classical Hindu Theologies." *Faith and Philosophy*, Vol. 14, No. 4 (October 1999): 523-543.

Coady, C. A. J. *Testimony: A Philosophical Study.* Oxford: Clarendon Press 1992.

Cohen, Stuart. “Justification and Truth.” *Philosophical Studies* 46 (1984): 279-96.

Conee, Early and Richard Feldman. “The Generality Problem for Reliabilism” in Sosa and Kim 2000.

Dancy, Jonathan. “Arguments from Illusion.” *Philosophical Quarterly* **45** (1995), 421-438. Reprinted in Byrne and Logue 2009 (citations will be from the latter).

Dancy, Jonathan and Ernest Sosa. *A Companion to Epistemology.* Malden, MA: Blackwell, 1992.

Dasgupta, Surendranath. *A History of Indian Philosophy.* Vol. 1. Delhi. Motilal Banarsidass 1975. Reprint 2004.

Dasti, Matthew. “Testimony, Belief Transfer, and Causal Irrelevance: Reflections from India’s Nyāya School.” *History of Philosophy Quarterly*, Vol. 25, No. 4 (2008), 281-299.

Dasti, Matthew and Stephen Phillips. “Pramāṇa are Factive: A Response to Ganeri.” Forthcoming, *Philosophy East and West.*

Davis, Jr. Donald R. “On Atmatusti as a Source of Dharma.” *Journal of the American Oriental Society* 127.3 (2007): 51-68.

Deutsch, Eliot. *Advaita Vedānta: A Philosophical Reconstruction.* Honolulu: East West Center Press 1969.

Dharmakīrti. *Pramāṇavārtika, With the Commentary* "Vṛtti" *of Ācārya Manorathānandin*. Critically Edited by Swami Dwarikadas Shastri. Varanasi: Bauddha Bharati 1968.

Dravid, Raja Ram. *The Problem of Universals in Indian Philosophy.* Delhi: Motilal Banarsidass 2001.

Dretske, Fred. *Naturalizing the Mind.* Cambridge, Mass: The MIT Press 1994.

D'sa, Francis. *Śabda-prāmāṇyam in Śabara and Kumārila.* Vienna: The De Nobili Research Library 1980.

Elga, Adam. "Reflection and Disagreement." Forthcoming in Nous.

Enock, David and Joshua Schester. "How are Basic Belief-Forming Methods Justified?" *Philosophy and Phenomenological Research*, vol. 76, no. 3 (May 2008): 547-579.

Feldman, Richard. "Epistemological Puzzles About Disagreement." Forthcoming in *Epistemology Future*s.

Flew, Anthony. *An Introduction to Western Philosophy: Ideas and Argument from Plato to Sartre.* Indianapolis: the Bobbs-Merril Company 1971.

Forrest, Peter. "Epistemology of Religion." *Stanford Encyclopedia of Philosophy.* Journal online, accessed August 22, 2006. Available from *http://plato.stanford.edu/entries/religion-epistemology/*. Internet.

Fricker, Elizabeth. "The Epistemology of Testimony." *Proceedings of the Aristotelian Society, Supplementary Volume,* 61 (1987), 57-106.

Ganeri, Jonardon. *Semantic Powers: Meaning and the Means of Knowing in Classical Indian Philosophy.* Oxford: Clarendon Press 1999.

Ganeri, Jonardon ed. *Indian Logic: A Primer*. Great Britain: Curzon 2001a.

Ganeri, Jonardon. *Philosophy in Classical India: The Proper Work of Reason.* London and New York: Routledge 2001. [Will be cited as "Ganeri 2001b".]

Ganeri, Jonardon. Review of *Epistemology of Perception*, by Stephen H. Phillips and N. S. Ramanuja Tatacharya. *Journal of the American Oriental Society* 127.3 (2007): 349-354.

Gangopadhyaya, Mrinalkanti, trans. *Nyāya: Gautama's Nyāya-sūtra with Vātsyāyana's Commentary.* Calcutta: Indian Studies 1982.

Garfield, Jay. *The Fundamental Wisdom of the Middle Way.* New York: Oxford University Press 1995.

Gettier, Edmund, "Is Justified True Belief Knowledge?" in Sosa and Kim 2000.

Ghokale, Pradeep P. *Inference and Fallacies Discussed in Ancient Indian Logic (with special reference to Nyāya and Buddhism).* Bibliotheca Indo-Buddhica Series, Sunil Gupta, ed. Delhi: Sri Satguru Publications 1992.

Goldman, Alvin. "Reliabilism" in Dancy and Sosa 1993.

Goldman, Alvin. "What is Justified Belief?" in Sosa and Kim 2000.

Greco, John and Sosa, Ernest, eds. *The Blackwell Guide to Epistemology.* Massachusetts: Blackwell Publishers 1999.

Griffiths, Paul J. "What do Buddhists Hope for From Antitheistic Argument?" *Faith and Philosophy,* Vol. 6, No. 4 (October 1999): 506-522.

Haberman, David L. *Acting as a Way of Salvation: A Study of Rāgānuga Bhakti Sādhana.* Delhi: Motilal Banarsidass 1988.

Haberman, David L., ed. and trans. *The Bhaktirasāmṛasindhu of Rūpa Gosvāmin*. New Delhi: Indira Gandhi National Centre For the Arts 2003.

Haddock, A. and Fiona Macpherson. *Disjunctivism: Perception, Action, Knowledge.* New York: Oxford University Press 2008.

Hattori, Masaaki, translator and annotator. *Dignāga, On Perception, being the* pratyakṣapariccheda *of Dignāga's* Pramāṇasamuccaya *from the Sanskrit fragments and the Tibetan versions.* Cambridge, Massachusetts: Harvard University Press 1968.

Hayes, Richard P. *Dignāga on the Interpretation of Signs*. Studies in Classical India, No. 9. Dordrecht: Kluwer 1988.

Hume, David. *An Enquiry Concerning Human Understanding*, in *The Empiricists*. New York: Doubleday 1990.

Hume, David. *Dialogues concerning Natural Religion*, in Stephen M. Cahn, ed. *Classics of Western Philosophy*. Indianapolis: Hackett Publishing Company 2002.

Huemer, Michael. "Compassionate Phenomenal Conservatism." *Philosophy and Phenomenological Research* Vol. 74, No. 1 (2007): 30-55.

Huxley, Aldous. *The Perennial Philosophy.* New York: Harper & Row 1944.

Ingalls, Daniel H.H. *Materials for the Study of Navya-Nyāya Logic*. Harvard Oriental Series, Vol. 40. Cambridge, Massachusetts: Harvard University Press 1951.

Ingalls, Daniel H.H. "Logic in India" in Ganeri 2001a.

Iyer, S. R., Editor and Translator, *Tarkabhāṣā* of Keśava Miśra. Varanasi: Chaukhambha Orientalia, 1979.

Jackson, Roger. "Dharmakīrti's Refutation of Theism." *Philosophy East and West*, Vol. 36, No. 4 (October 1986): 315-48.

James, William. *The Varieties of Religious Experience.* New York: Random House 1902.

Jayanta Bhaṭṭa. *Nyāya-mañjarī.* Critically Edited by Vidvan, K. S. Varadacarya. Vol 1. Mysore: Oriental Research Institute 1969.

Jayanta Bhaṭṭa. *Nyāya-mañjarī.* Critically Edited by Vidvan, K. S. Varadacarya. Vol 2. Mysore: Oriental Research Institute 1983.

Jayanta Bhaṭṭa. *Nyāya-mañjarī*. Translated by Janaki Vallabha Bhattacaryya. Vol. 1. Delhi: Motilal Banarsidass 1978.

Jha, Sir Ganganatha. *Pūrva-mīmāṁsā in its Sources.* 2nd ed. Varanasi: The Banaras Hindu University 1964.

Jha, Ganganatha, trans. *Śabara-bhāṣya*. Volume 1. Gaekwad's Oriental Series, No. 66. Baroda: Oriental Institute 1973.

Jha, Ganganatha, trans. *Slokavartika.* Sri Garib Das Oriental Series No. 8. Delhi: Sri Satguru Publications 1983.

Jha, Sir Ganganatha, trans. *The Nyāya-sūtras of Gautama.* Vols 1-4. Delhi: Motilal Banarsidass 1999.

Jordan, Jeff. "Pragmatic Arguments for Believing in God." *Stanford Encyclopedia of Philosophy.* Journal online, accessed August 20, 2006. Available from *http://plato.stanford.edu/entries/pragmatic-belief-god/*. Internet.

Kajiyama, Yuichi. *An Introduction to Buddhist Philosophy: An Annotated Translation of the Tarkabhāṣā of Mokṣākaragupta*. Vienna: Arbeitskreis für Tibetische und Buddhistische Studien Universität Wien 1998.

Kaṇāda. *Vaiśeṣika-sūtra*. Translated by Nandalal Sinha. Sacred Books of the Hindus 6. Allahabad: Sidhīndranāta Vasu 1911. Reprint, New York: AMS Press 1974.

Keith, A. B. *Indian Logic and Atomism.* New Delhi: Oriental Books Reprint Corporation 1977.

Keśava Miśra. *Tarkabhāṣā.* Ed. Narayan Nathaji Kulkarni. Poona: Oriental Book Agency 1953.

Krishna, Daya. *Indian Philosophy: A Counter Perspective.* Delhi: Oxford University Press 1991.

Kumar, Shiv. *Upamāna in Indian Philosophy.* Delhi: Eastern Book Linkers 1994.

Lackey, Jennifer. "The Nature of Testimony." *Pacific Philosophical Quarterly* 87 (2006), 177–197.

Lackey, Jennifer. "Learning From Words". *Philosophy and Phenomenological Review* 71 (2006), 77-101. [Will be cited as 2006b].

Lanman, Charles Rockwell. *A Sanskrit Reader: Text, Vocabulary and Notes.* 1884. Reprint, Delhi: Motilal Banarsidass Publishers 2004.

Larson, Gerald James. *Classical Sāṁkhya*. 2nd ed. Delhi: Motilal Banarsidass 1979.

Lehrer, Keith. "Externalism and Epistemology Naturalized" in Sosa and Kim 2000.

Lipner, Julius. *The Face of Truth: A Study of Meaning and Metaphysics in the Vedāntic Theology of Rāmānuja.* Albany: State University of New York Press 1986.

Locke, John. *An Essay Concerning Human Understanding*. Edited by Peter H. Nidditch. Oxford: Oxford University Press 1975.

Lott, Eric. *God and The Universe in the Vedāntic Theology of Rāmānuja.* Madras: Rāmānuja Research Society 1976.

Lott, Eric. *Vedantic Approaches to God.* New York: Barnes and Noble 1980.

Mackie, J. L. *The Miracle of Theism:* Arguments for and Against the Existence of God. Oxford: Clarendon Press 1982.

Mādhavācarya. *Sarvadarśanasaṁgraha*. Compiled, edited and transliterated, with introduction by Dr. Madan Mohan Agrawal. Delhi: Chaukhamba Sanskrit Pratishthan 2002.

Madhavananda, Swami, trans. *Bhāṣā-pariccheda with Siddhānta-muktāvali* by *Viśvanātha Nyāya-pañcānana.* 3rd ed. Calcutta: Advaita Ashrama 1977.

Matilal, B. K. *Nyāya-Vaiśeṣika.* A History of Indian Literature, Vol. 6, Fasc. 2. Edited by Jan Gonda. Weisbaden: Otto Harrassowitz 1977.

Matilal, B. K. *Perception.* Oxford: Clarendon Press: Oxford 1986.

Matilal, B. K. *The Character of Logic in India.* Albany: SUNY Press 1998.

Matilal, B. K. and Arindam Chakrabarti, eds. *Knowing from Words.* Synthese Library Vol. 230. Dodrecht: Kluwer Academic Publishers 1994.

Matilal, B. K. and J. L. Shaw, eds. *Analytical Philosophy in Comparative Perspective.* Synthese Library Vol. 178. Dodrecht: Dordecht: D. Reidel Publishing Company 1985.

McDermott, C. "Yogic Direct Awareness as a Means of Valid Cognition in Dharmakīrti and Rgyal-tshab." In M. Kiyota, ed., *Mahāyāna Buddhist Meditation Theory and Practice*. Hawaii: University of Hawaii Press 1978.

McDowell, John. Criteria, Defeasibility, and Knowledge. *Proceedings of the British Academy* 68 (1982), 455-479. Reprinted in Byrne and Logue 2009 (citations will be from the latter).

McDowell, John. "Knowledge and Hearsay" in Matilal and Chakrabarti 1994.

McDowell, John. Knowledge and the Internal. *Philosophy and Phenomenological Research* 55, (1995) 877-93. Reprinted in Sosa and Kim 2000 (citations will be from the latter.)

McDowell, John. The Disjunctive Conception of Experience as Material for a Transcendental Argument. In Haddock and MacPherson 2008.

Mohanty, J.N. "The Nyāya Theory of Doubt." *Visva Bharati Journal of Philosophy* 3 (1965): 15-35.

Mohanty, J.N. *Gaṅgeśa's Theory of Truth.* Santiniketan, West Bengal: Centre for Advanced Study in Philosophy 1966.

Mohanty, J.N. "A Fragment of the Indian Philosophical Tradition—Theory of *Pramāṇa.*" *Philosophy East and West,* vol. 38, no. 3 (1988), 251-260.

Mohanty, J.N. "Indian Epistemology" in Dancy and Sosa 1992.

Mohanty, J.N. "Is There an Irreducible Mode of Word-generated Knowledge?" in Matilal and Chakrabarti 1994.

Mohanty, J.N. *Classical Indian Philosophy.* Lanham: Rowman & Littlefield Publishers, Inc., 2000.

Mondal, Pradyot. "Some Aspects of Perception in Old Nyāya." *Journal of Indian Philosophy* 10 (1982): 357-376.

Moore, G.E. "Proof of an External World" in Sosa and Kim 2000.

Nāgārjuna. *The Dialectical Method of Nāgārjuna:* Vigrahavyāvartinī. Translated from the original Sanskrit with Introduction and Notes by Kamaleswar Bhattacarya. Text critically edited by E. H. Johnston and Arnold Kunst. Delhi. Motilal Banarsidass, 1998.

Narasimhacary, M. *Contribution of Yāmunācarya to Viśiṣṭādvaita.* Hyderbad: Sri Jayalakshmi Publications 1998.

Nozick, Robert. "Knowledge and Skepticism" in Sosa and Kim 2000.

Nyāya-Tarkatirtha, Taranatha and Amarendramohan Tarkatirtha, eds. *Nyāyadarśanam*: *with Vātsyāyana's Bhāṣya, Uddyotakara's Vārttika, Vācaspati Miśra's Tātparyaṭīkā* & *Viśvanātha's Vṛtti.* Calcutta: Munshiram Manoharlal 2003. [This text will be cited as ND.]

Nyāya-sūtra of Gotama. Translated by M.M. Satisa Chandra Vidyābhūṣana, Revised and Edited by Nandalal Sinha. Delhi: Motilal Banarsidass 1990.

Oetke, Claus. "Limitations of Theories of *Pramāṇa.*" *Journal of Indian Philosophy* 31 (2003)*:* 199-227.

Olivelle, Patrick. *The Early Upaniṣads: Annotated Text and Translation.* New York: Oxford University Press 1998.

Otto, Rudolf. *The Idea of the Holy.* London: Oxford University Press 1923.

Paley, William. *Natural Theology: or Evidences of the Existence and Attributes of the Deity.* London: J. Faulder, 1809. Book on-line, accessed March 22, 2003 Available from http://www.hti.umich.edu/cgi/p/pd-modeng/pd-modeng-idx?type=header&byte=53049351.

Pandya, Raghavendra. *Major Hetvābhāsas: A Formal Analysis*. Delhi: Eastern Book Linkers 1984.

Pappas, George. "Internalist vs. Externalist Conceptions of Epistemic Justification." *Stanford Encyclopedia of Philosophy.* Journal online, accessed November 12, 2008. First published in 2005. Available from *http://plato.stanford.edu/entries/justep-intext/#2*. Internet

Patil, Parimal G. *Against A Hindu God: Buddhist Philosophy of Religion in India.* New York: Columbia University Press 2009.

Perrett, Roy W. *Indian Philosophy of Religion*. Studies in Philosophy and Religion, Vol. 13. Dordrecht: Kluwer Academic Publishers 1989.

Perrett, Roy, ed. *Indian Philosophy: Epistemology*: New York: Garland Publishing, Inc. 2000.

Perrett, Roy. "Is Whatever Exists Knowable and Namable?" in Perrett, ed. 2000.

Phillips, Stephen. *Classical Indian Metaphysics: Refutations of Realism and the Emergence of "New Logic."* Chicago: Open Court 1995.

Phillips, Stephen. "Counter Matilal's Bias: The Philosophically Respectable in Indian Spiritual Thought." *Studies in Humanities and Social Sciences*, vol. III, no. 2 (1996), 173-84.

Phillips, Stephen. "There's Nothing Wrong With Raw Perception: A Response to Chakrabarti's Attack on Nyāya's *Nirvikalpika Pratyakṣa.*" *Philosophy East and West*, Vol. 51, No. 1 (2001), 104-113.

Phillips, Stephen. "Genuine vs. Apparent Knowledge and Justification." *Evam*, 3.1 (2004), 201-11.

Phillips, Stephen. *Yoga, Karma, and Rebirth: A Brief History and Philosophy.* Columbia University Press 2009.

Phillips, Stephen. "The Classical Indian Criteriological Argument for the Existence of God." Currently unpublished.

Phillips, Stephen. "Nyāya's *pramāṇa* (Knowledge-Generators) as Natural Kinds." Currently unpublished [Will be cited as "Phillips unpublished b"].

Phillips, Stephen and N. S. Ramanuja Tatacharya. *Gaṅgeśa on the Upādhi: The "Inferential Undercutting Condition"*. New Delhi: Indian Council of Philosophical Research 2002.

Phillips, Stephen and N. S. Ramanuja Tatacharya. *Epistemology of Perception: Gaṅgeśa's* Tattvacintāmaṇi *Jewel of Reflection on the Truth (About Epistemology), The Perception Chapter* (pratyakṣa-khaṇḍa). New York: American Institute of Buddhist Studies 2004.

Plantinga, Alvin. *God and Other Minds: A Study of the Rational Justification of Belief in God.* Ithaca: Cornell University Press 1967. Reprint, Ithaca: Cornell University Press 1990.

Plantinga, Alvin. "Reason and Belief in God." In Plantinga, Alvin and Wolterstorff, Nicholas, eds. *Faith and Rationality*. Notre Dame, Indiana: University of Notre Dame Press 1983.

Plantinga, Alvin. "Positive Epistemic Status and Proper Function" *Philosophical Perspectives,* Vol. 2, *Epistemology* (1988): 1-50.

Plantinga, Alvin. *Warrant: The Current Debate*. New York: Oxford University Press 1993.

Plantinga, Alvin. *Warrant and Proper Function.* New York: Oxford University Press 1993 [will be cited as "Plantinga 1993b"].

Plantinga, Alvin. *Warranted Christian Belief.* New York: Oxford University Press 2000.

Plantinga, Alvin. *"On Proper Basicality". Philosophy and Phenomenological Research* Vol. 75, No. 3 (Nov. 2007): 612-21.

Plantinga, Alvin. "Religion and Science." *Stanford Encyclopedia of Philosophy.* Journal online, accessed Nov. 4, 2008 First published in 2007. Available from *http://plato.stanford.edu/entries/religion-science/.* Internet.

Pollock, John. *Contemporary Theories of Knowledge.* Totowa: Roman & Littlefield 1986.

Potter, Karl H., ed.. *Encyclopedia of Indian Philosophies.* Vol. 2. *Nyāya-Vaiśeṣika*. Delhi: Motilal Banarsidass 1977.

Potter, Karl H. "Does Indian Epistemology Concern Justified True Belief?" *Journal of Indian Philosophy* 12 (1984): 307-27.

Potter, Karl H., ed.. *Encyclopedia of Indian Philosophies.* Vol. 6. *Indian Philosophical Analysis: Nyāya-Vaiśeṣika from Gaṅgeśa to Raghunātha Śiromaṇi*. Princeton: Princeton University Press 1992.

Praśastapāda. *Padārthadharmasaṁgraha*, with Śridhara's *Nyāyakandalī* commentary. Translated by Gaṅgānātha Jhā. 1915. Reprint Delhi: Chaukhambha Orientalia 1982.

Prichard, Duncan. "McDowellian Neo-Mooreanism." In Haddock and McPherson 2008.

Pryor, James. "The Skeptic and the Dogmatist." *Noūs* Vol. 34, No. 4 (2000), 517-549.

Pryor, James. "Highlights of Recent Epistemology," *British Journal of the Philosophy of Science* 52 (2001), 95-124.

Putnam, Hilary. *Reason, Truth, and History*. Cambridge: Cambridge University Press, 1981.

Ratzsch, Del "Teleological Arguments for the Existence of God." *Stanford Encyclopedia of Philosophy.* Journal online, accessed May 26, 2007. Available from *http://plato.stanford.edu/entries/ teleological-arguments/*. Internet.

Saha, Sukharanjan. *Epistemology in Pracina and Navya Nyaya.* Jadavpur Studies in Philosophy. Kolkata: Jadavpur University 2003.

Sellars, Wilfred. *Science, Perception and Reality*. London: Routledge & Kegan Paul 1963.

Sextus Empiricus. *Outlines of Skepticism*. Translated by Jonathan Barnes. Cambridge: Cambridge University Press 2000.

Shastry, Pt. Dhundiraj, ed. *Bhāṣāpariccheda alias Nyāya-Siddhānta-Muktāvalī of Śrī Viśvanātha Bhaṭṭācārya*. 2nd ed. Delhi: Chaukhamba Sanskrit Pratishthan 1991.

Shaw, J. L. "'Saturated' and 'Unsaturated': Frege and the Nyāya." *Synthese* 80 (1989), 373-394.

Siderits, Mark. "The Madhyamaka Critique of Epistemology I." *Journal of Indian Philosophy* 8 (1980), 307-335.

Siderits, Mark. *Buddhism as Philosophy.* Indianapolis: Hackett Publishing Company, Inc. 2007.

Sinha, Jadunath. *Indian Psychology: Cognition*. Vol. 1. 2nd Ed. Calcutta: Sinha Publishing 1958.

Sobel, Jordan Howard. *Logic and Theism: Arguments For and Against Beliefs in God.* Cambridge: Cambridge University Press 2004.

Sosa, Ernest. *Knowledge in Perspective: Selected Essays in Epistemology.* Cambridge: Cambridge University Press 1991.

Sosa, Ernest. "Proper Functionalism and Virtue Epistemology." *Nous* 27:1 (1993), 51-65.

Sosa, Ernest. "The Raft and the Pyramid." *Midwest Studies in Philosophy, vol. 5: Studies in Epistemology.* Minneapolis: University of Minnesota Press 1980, 3-25. Reprinted in Sosa and Kim 2000.

Sosa, Ernest and J. Kim, eds. *Epistemology: An Anthology*. Massachusetts: Blackwell Publishers 2000.

Srīnivāsadāsa. *Yatīndramatadīpikā.* 2nd Edition. Translation and notes by Swāmi Ādidevānanda. Mylapore, Madras: Sri Ramakrishna Math 1967.

Stace, William. *The Teachings of the Mystics*. New York: New American Library 1960.

Steup, Matthias. "Epistemology". *Stanford Encyclopedia of Philosophy.* Journal online, accessed August 16, 2006. Available from http://plato.stanford.edu/entries/epistemology/. Internet.

Strawson, P. F. "Skepticism, Naturalism and Transcendental Arguments" in Sosa and Kim 2000.

Stroud, Barry. "The Problem of the External world" in Sosa and Kim 2000.

Swinburne, Richard. *The Existence of God.* 2nd ed. Oxford: Clarendon Press 2004.

Taber, John. *A Hindu Critique of Buddhist Epistemology: Kumārila on Perception; the "Determination of Perception" chapter of Kumārila Bhaṭṭa's* Ślokavārttika. London and New York: RoutledgeCurzon 2005.

Taliaferro, C. *Contemporary Philosophy of Religion.* Malden, Mass., Oxford, and Carleton, Victoria: Blackwell Publishing 1998. Reprint 2004.

Tarkasaṁgraha and Tarkasaṁgraha-dīpikā of Annaṁbhaṭṭa. Translated and edited, with commentary by Gopinath Bhattacarya. Calcutta: Progressive Publishers 1976.

Tattvacintāmaṇi of Gaṅgeśa Upādhyāya, *pratyakṣa-khaṇḍa*. With extracts from the commentaries of Shri Mathuranatha Tarkavagisha and Shri Jayadeva Mishra. Vol. 1. Edited by Kamakhyanath Tarkavagisha. Delhi: Chaukhamba Sanskrit Pratishthan 1990.

Thakur, Anantalal, ed. *Nyāyavārttikatātparyaṭīkā of Vācaspati Miśra*. New Delhi: Indian Council of Philosophical Research 1996.

Thakur, Anantalal, ed. *Nyāyavārttikatātparyapariśuddhi of Udayanācārya.* New Delhi: Indian Council of Philosophical Research1996 [Will be cited as "Anantalal 1996b"].

Udayana, *Ātmatattvaviveka*, Edited by Mahamahopadhyaya Vindhyesvariprasad Dvivedin and Pandit Lakshmana Sastri Dravida. Calcutta: The Asiatic Society 1986.

Udayana. *Ātmatattvaviveka.* Translation and commentary by N. S. Dravid. Shimla: Indian Institute of Advanced Study 1995.

Udayana. *Nyāyakusumāñjali*. Translation and commentary by N. S. Dravid. New Delhi: Indian Council of Philosophical Research 1996.

Upadhyaya, K. N. "Indian Tradition and Negation." *Philosophy East and West* 38 (July 1989) 281-289.

Unger, Peter. "An Argument for Skepticism" in Sosa and Kim 2000.

van Bijlert, Vittorio A. *Epistemology and Spiritual Authority*: *The Development of Epistemology and Logic in the Old Nyāya and the Buddhist School of Epistemology with an Annotated Translation of Dharmakīrti's* Pramāṇavārttika *II (Pramāṇāsiddhi*) *VV. 1-7.* Wiener Studen Zur Tibetologie Und Buddhismskunde heft 20. Wien 1989.

van Buitenen, J. A. B. *Rāmānuja's Vedārthasaṁgraha: Introduction, Critical Edition and Annotated Translation.* Poona: Deccan College Postgraduate and Research Institute, 1956.

Vātsyāyana. *Nyāya-bhāṣya*. In *Nyāya: Gautama's Nyāya-sūtra with Vātsyāyana's Commentary.* Translated by Mrinalkanti Gangopadhyaya, with introduction by Debiprasad Chattopadhyaya. Calcutta: Indian Studies 1982.

Vattanky, George, S. J. *Gaṅgeśa's Philosophy of God*. Madras: The Adyar Library and Research Centre 1984.

Wainwright, William J. *Mysticism: A Study of its Nature, Cognitive Value and Moral Implications.* Wisconsin: The University of Wisconsin Press 1981.

Wainwright, William J. *Philosophy of Religion.* Belmont, California: Wadsworth Publishing 1988.

Wickelgren, Ingrid. "The Strange Senses of Other Species." *IEEE Spectrum.* March 1996: 32-37.

Williams, Michael. "Skepticism" in Greco and Sosa 1999.

Williams, Michael. *The Problems of Knowledge.* Oxford: Oxford University Press 2001.

Williamson, Timothy. *Knowledge and its Limits.* New York: Oxford University Press 2000.

Woo, Jeson. "Dharmakīrti and his Commentators on Yogipratyakṣa." *Journal of Indian Philosophy* 31 (2003) 439-448.

Wright, Crispin. "Comment on John McDowell's 'The Disjunctive Conception of Experience as Material for a Transcendental Argument.'" in Haddock and MacPherson 2008.

Wynn, Mark. “Phenomenology of Religion.” *Stanford Encyclopedia of Philosophy* Journal online, accessed June 9, 2009. First published in 2008. Available from *http://plato.stanford.edu/entries/phenomenology-religion/#RelExpEncGod*. Internet.

Yandell, Keith. *Epistemology of Religious Experience.* Cambridge: Cambridge University Press 1993.

Vita

Matthew Roe Dasti was born in Pt. Pleasant, NJ on March 12, 1976, the son of Lynn and Jerry Dasti. He attended Rutgers University, graduating with a BA in History and Philosophy in 2004 and completing a Henry Rutgers Thesis with highest honors. He has attended the University of Texas at Austin from 2004, where he received a MA in Philosophy in 2008, and has taught various undergraduate courses in philosophy. He is married to Nandanie Dasti and has two daughters, Anasuya and Leela.

Permanent Address: 2122 Hancock Dr. #117/Austin, TX 78756

This manuscript was typed by the author.